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FARM

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"PRACTICE WITH THEORY AND SCIENCE!"

NUMBER 31.

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Agricultural.

HOW IT AFFECTS THE FARMERS.

has been a radical change, and the dressed beef from Chicago has driven them out and their surplus stock. A letter received by Mr. Geo. Beck, of this city, from a party at Mount Morris, on the F. & P. M. R. R., shows just how that section of the State is affected. The writer says:

"Have you got anybody in your employ whom you send to the country to buy cat-tle, or could you send a good party here as a Our farmers in this neighborhood ed to find a market for their stock in Bay City and Saginaw, but the dressed beef from Chicago has stopped this trade entirely. There are several loads of cattle in this price, and I have a pasture that adjoins the R. stock vards on the track. some good straight man if you can to buy this stock. The run is short and the freight

We are sorry to say that this state of affairs is not confined to the Saginaw Valley alone, but is becoming quite general throughout the State. At a meeting of live stock men held in Jackson a few weeks ago, the same complaint was made by some of the parties present. This is a matter that seriously concerns every farmer in our State, and they should be taking measures to protect themselves from this unjust competition. We say that it is unjust, for while our State is quarantined against Texas cattle, the larger part of the dressed beef sent into our State comes from there. At the present time cattle are selling at a very low price in Chicago, so low in fact that no farmer in Michigan could raise cattle to compete with them. Now, if these cattle are diseased when alive, can their meat when dead be healthy food? That they will transmit disease, when alive, that is fatal to our cattle. we have had ample proof during the last five or six years; whether their meats affect the consumers has never been investigated.

In the report of the U.S. Department of Agriculture for 1887, we find the following interesting correspondence in reference to the osage orange hedge, which is commended to the thoughtful consideration of those of our farmers who are contemplating growing hedges:

I write to ask if you can tell me of a way to destroy the osage orange hedge fence. This is becoming unpopular among the hest farmers on account of the cos trimming, making it hog-proof, and its taking the substance of the ground for such a wide space each side of it. Cutting it, letting it dry, and then burning will not do, as it will sprout again from the old roots.

L. B. C. To which Wm. Saunders, Superintendent of Gardens and Grounds, Horticulturist, etc., replies:

is to cut the tops of the plants so that the remaining stock and roots can be grubbed out, and the more effectually these are re suckers: but when these do appear they ould be hoed out as other weeds are destroyed. Plowing the ground deeply for several feet on each side of the original edge line will break and bring to the e some of the roots, every fragment of which should be removed. It will not be practicable to get rid of every piece of root at once, but if timely attention is given to the removal of such growths as may appear, the whole will eventually be

M. PECKHAM & Son, of Albion, cattle were bred by the owners.

WORKING CORN.

There seems to be very much unsettled opinion upon the policy of working corn in the latter period of its growth. Sometimes a farmer will think he has "caught on" to the whole secret, and will follow the supposed teachings of his one experiment, until he at last finds himself the victim for working after a pattern. Writers in agricultural journals frequently enunciate a doctrine as a rule of conduct in corn cultivation, and then the next month perhaps, or the next year at the farthest trust to the short memories of the readers, to sustain his reputation and to retain his confidence.

Even while appreciating to the full extent the truth of the above, I still have the To the Editor of the Michigan Farmer. 'cheek," or, to put it more mildly, the temerity to give further expression to the faith that is in me, regarding this dubious topic. With us there begins to appear indications of the annual dry spell. Corn fields are in various degrees of forwardness. as he has assumed to speak for his par-Those that were planted over on account of | ticular locality it may not be amiss for me worms or poor seed have not yet begun to to rise and speak for mine. Up to the tassel, while the more favored fields are present season I have raised nothing but silking out. No rain has fallen since the Clawson for some seven or eight years, 25th of June to more than freshen up the since I first obtained the seed. Two or surface of the ground. At that date over an inch of rain fell, and previous rains had try Faltz or some other variety, on account served to keep the soil well saturated. Now as usual however, every farmer has a dif ferent experience to relate about the effect my information received from threshers of his cultivation since harvest, and up to date-July 25th-I have taken some pains were exceptional cases, and when the light to look into the fields, and to make inquiries into practices of working as well as I invariably found a balance in favor of the into the condition of the crop. I find one field that has been worked only with a fine exceptionally bad one for wheat with us, tooth cultivator, twice over each way, once in a row, with corn in good condition and In former years the farmers adjacent to fresh and tasselling out. Another field on Bay City and the Saginaws found a first- an adjoining farm that had been well class market for their live stock, but there worked before harvest, and a thorough plowing each way, twice in a row with a and determined to make my test on these two shovel plow, since that, looks sick, they are now seeking another market for and all growth checked. Another field had four acres cultivated before the heavy rains spoken of in June, and the remaining part of the field finished after the rain. Both parts are fresh, but the portion cultivated since the rain has a denser look in the row, and an unmistakably darker color to the leaf, with a promise of continued vigor, while the crusted surface part of the field looks as though it had seen its best days and might falter out its allotted time, and give a small crop. The owner of this kill badly, by being twice almost wholly vicinity that can be bought at a reasonable | field is strong in the belief that when corn is well cultivated following a rain, there is

positive harm in stirring until other rains come to crust the surface, when it should be again cultivated, even about \$12 per car." though it had been just finished. He argues that is desired; and when this is once secured, "let well enough alone;" he will not disturb his corn again. This conclusion is warranted by the facts and conditions up to the present, but there may be exigencies to follow that may change the status of things. Suppose no rain fails for thirty days more. would not a deeper cultivation now promote and favor a continuance of moisture sufficient to tide the crop over to perfection? I finished a 20-acre field with the two shovel twice in the row one way last week, and have now crossed lightly with a fine tooth cultivator, once in the row, spreading so as to fair to say that the corn did show the effects | Champion Amber four bushels and 10 lbs of the deep plowing last week, in a wilted appearance following the plow, but I believe it has fully recovered, and its appearance this morning was very satisfactory indeed. And the field, with not a weed in sight, and The Osage Orange for Hedges. with at least four inches of mellow soil between the rows, is, I think, in a condition to withstand an extremely dry spell quite as well as any of the fields spoken of. I account for the forlorn appearance of the field so severely plowed both ways, in the fact that it is mostly second planting, on account of poor seed planted too early, and that in consequence the growth is small and needed all the support that the earth could furnish. Cutting off so many of the roots

> was too much of a shock for the plant to withstand, as its drooping and rolled up leaves showed. Whether it will recover its loss is a question for the future, which I shall not attempt to forecast. It was a kind of heroic treatment that I should not have dared to continue after noting its effects. It may be said that my treatment was quite similar, which is true, but only in degree. The levelling down with the cultivator, I think, adds greatly to the efficiency of the soil to continue growth, should it continue dry for any length of time. The two shovel

> a part of the furrow nearly to the depth of the plowing. This would prevent fibres from the roots crossing this trench, unless they descended to a lower depth than is natural for corn to go. I believe in a uniform level surface, but I want something more than surface mellowness

> plow left the surface very rough and exposed

when a dry spell is teared. I don't think any east-iron rule for cultivation can be formulated, which shall be Calhoun Co., announce that they will have applicable to all seasons, nor comparatively a sale of Shorthorns on October 18th, at applicable. The nearest to it is the suggeswhich time they will offer some 21 head of tion that all cultivation should cease when the Roan Duchess, Victoria and Flora fam- the corn is tasselling out. But it is safe to ilies. This herd has been bred for dairy say that corn in the early stages of growth stick by it, and not try to change with all purposes, and with few exceptions the needs cultivating after every rain, and while the caprices of the market. Clawson the ground is still moist. This seems to wheat is good enough bread timber for the

favor a continuance of the moisture in the soil. Even the effects of plowing the ground for the crop is seen between wet and dry plowing. The former retains its fertile, growing condition longer than the latter, and will continue its effective influence through to maturity. I believe the damage to the corn crop from present or prospective drought is not imminent, for the ground is still moist below the immediate surface, and sufficiently so to carry the crop forward to a fair harvesting.

EXPERIMENT WITH WHEAT.

The Clawson Vindicates Itself.

In the last issue of the FARMER your valued correspondent A. C. G. uses the following language: "Clawson is fast losing its popularity, and is being supplanted by Velvet Chaff and Australian White." Now three times I had been almost tempted to of stories of large yields, but in each case just before I was ready to make the test, convinced me that these glowing stories crops were reported, and the average struck, Clawson. Last season however was an and I was so dissatisfied with results that I varieties. Consulting the columns of the FARMER I noticed some reports of great vields of Velvet Chaff and Champion Amber. varieties. I accordingly procured from Prof. Johnson, of the College farm, ten bushels of Champion Amber, and from a party in Lenawee County four bushels of Velvet Chaff. The exact date of sowing I neglected to record, but it was not far from September 12th. The ground was "pine lands" and was a dry hard gravel-in fact you might say nearly all pulverized stone, with very little vegetable decomposition. Such a soil with us does not "winter kill" by heaving out, but it did this time winter enveloped in ice during our February thaws. wonder is that the crop was not an entire failure. But the ground had been well summer fallowed and moderately manured, that stirring wet soil the second time and my abiding faith in the summer fallow has a tendency to dry it out more quickly, was at no time entirely shaken. Usually and that an open, porous condition is all this ground produces medium sure crops, with short, stiff, bright straw and plump fair berry; and now for results: With the ten bushels of Champion Amber I sowed 873 rods of ground, (almost 51/4 acres) which produced 118 bushels, machine measuresay 21 1/2 bushels per acre. The four bushels Velvet Chaff was sown on 340 rods of ground, being 21/2 acres, producing just 40 bushels, being 18 bushels and 50 lbs per acre. The remainder of the field, 1,085 rods of ground, being six acres and 125 rods, was sown to Clawson. The seed taken from my own granary was not noted, but sown same as the others, as near as practicable. cover nearly the breadth between the rows. | Product, 174 bushels, being 25 bushels and My corn is still fresh and silking out. It is 40 lbs per acre. Result: Clawson over

> have been. In defense of the whole field it is but

son to take its chances among the stumps.

though the Clawson and Velvet Chaff withstood the action of drouth much better than the Champion Amber. 1 am sorry to see our brother A. C. G. getting so weak-kneed on the subject of Clawson flour. Since the early attempt of the Board of Trade to crush the Clawson, and its triumphant vindication by Professor Kedzie, I was not aware that the character of the Clawson had been publicly assailed. But with the experience of the past before them I think it would be folly for the farmers to reject the Clawson wheat at the behest of a few Grand Rapids millers. Two years ago buyers paid two or three cents about four-fifths of the wheat around here had become red, and the scale turned, and white wheat was given the preference. Whether this is caprice or speculation each one must judge for himself; but the sensible farmer when he gets a good variety should

million, and among them until further advices you may classify OLD GENESEE.

P. S.-We are now raking the stubble on the above field and expect to get from it as much as the seed we sowed, which as shown above is a little less than two bushels per acre.

> THE CHINCH BUG. (Bissus leucopterus.)

[From the Report of Prof. C. V. Riley, U. S. En-

Great and wide-spread have been the depredations of this repulsive pest, which next to the Rocky Mountain Locust is our most injurious species of insect enemy. From its depredations alone throughout the droughtstricken region of the Mississippi and Missouri valleys, during the present season, many millions of dollars' worth of grain have been destroyed, and in several localities accual privation is liable to follow.

The annexed crop reports, culled from various daily and weekly newspapers published throughout this region, will give a light intimation as to the true state of the ubject under consideration. Still, each region always draws its own afflictions as mildly as possible, while in speaking of those of a neighboring district they are liable to be somewhat overdrawn or exaggerated.

About the beginning of the second week in July rumors of chinch bug depredations at isolated localities throughout the droughtstricken area were first circulating through the press. A week later these rumors had ecome substantiated, and it was definitely known that their distribution and depredations were more wide-spread and general than was at first supposed; not only in this concluded to make a test of some other State, but also in Kansas, Missouri, Iowa, portions of Illinois, Minnesota, aud southeastern Dakota. But not until harvest arrived was the full extent of their depredations known.

Causes of Increase. - When the matter is arefully studied and the causes of the undue increase of this insect are taken into consideration the wonder is that the injury was not greater than it actually has been. The long-continued drought of last year, with large areas of chinch bug depredations, followed by a generally close and rather severe winter, after which came a warm, dry spring and hot, scorching summer; all these favored in the greatest degree the most complete development of the bug in all Its stages. But comparatively few of its natural enemies were present; and most of these, In fact the entire field might almost have too, being species that prefer preying upon rebel under consideration when they can be found. These predatory species had a plentiful host in the various species of Aphides, leaf beetles, and such like other depredators that were also present in great

One of the common and perhaps by far the chiefest of reasons for the large numbers of the pest that are always ready to take place whenever the advantage offers is the great carelessness of farmers in general to clean up" during late fall and early spring. Especially is this true in portions of Nebraska, Iowa and Kansas. The boos winter among rubbish of all kinds, in neadows, along fences, in brush heaps, mong fallen leaves, and among the debris ollected by hedges, weed patches, and long the outskirts of groves among the underbrush. But there is no use of my going over these points that have been mentioned again and again by all writers upon the sub-

After the bugs have become a pest, the per acre; Clawson over Velvet Chaff, six only effectual remedy is wet, cool weather. bushels per acre. But the strongest point For some reason or other their constitution in favor of the Clawson remains to be told. is not suited to a superfluity of moisture. Two-thirds of the field had peen cleared of stumps, and being determined to give the nor can they adapt themselves to it. Humidity has the effect of bringing on disnew seed the best possible chance I placed ease and final dissolution with them, just as it on the cleared ground, leaving the Clawas it does with various migratory locusts, The best estimates show that an acre of the only difference being in favor of the ground was devoted to stumps. Had the locusts. A good, soaking rain, or at most two or three of such, following in the course Clawson been given the clear ground thirty bushels to the acre would be but a fair es- of several days, generally ends effectually timate; and had the other varieties been the most threatening chinch bug devastagiven the stump land I will leave to the tion, while on the other hand a year or even reader to compute what the yield would two years of such weather are sometimes re-

quired to entirely obliterate a locust plague.

The question, then, naturally comes up, justice to state that this has been one of our can this insect not be materially kept in poorest wheat seasons. On all the plats at | check by some other and natural means? east one-fifth of the wheat was totally de- My answer to this question is yes; to a cerstroyed by the ice of last winter, and all tain degree, this is quite possible, and not suffered materially from extreme drouth, nearly so difficult a task as one might suppose. A good cleaning up and burning of rubbish of all kinds in late fall, winter, or early spring, will answer the purpose, if the work be general, by reducing the number of hibernating insects. Osage orange and all other very brushy hedges are the most attractive retreats, and at the same time the most formidable retreats to master. For my part, I would be in favor of removing these and replacing them with some other kind not so difficult to keep free from the collecting debris carried by winds. Uncultivated prairie lands adjoning fields should also be burned early in spring. The break ing down and burning of corn-stalks in more for red wheat than white. Last year spring following a chinch bug year will also destroy myriads of the insects that have hibernated between the leaves and stalks. At other times, however the stalks had bet ter be utilized as manure by plowing under. If covered deeply, they will be a remedy fully as effectual as if burned. Protect the birds, and above all the quails, for they destroy countless numbers of hibernating insects of various kinds that are to be pick-

ed up about hedges and such like rescrts frequented by these birds throughout the year. Although belonging to the granivorous birds, the quail is essentially insectivorous except during inclement weather, when insects are not easily obtained. In my profession as taxidermist I have dissected many different species of birds, in the crops of which were contained many injurious insects of various kinds, the chinch bug

among the others. In no other instance do I remember of the presence of this insect in the crop of a bird in so great numbers as in that of the quail. As a rule, but few birds, mammals, reptiles, or rapacious insects seem to relish any of the odoriferous members of the order Hemiptera or true bugs. In winter, however, this repugnance is partially overcome, and now and then even a chinch bug seems a delicate morsel when 'meat' is scarce. Very few insects are known to prey upor

the chinch bug; while I, myself, have never observed any of the species which have been credited with the good work-thus attacking the enemy. True, I have frequently seen different species of Lady-bugs (Coccinella, Hippodamia, etc.) and the Lace-wing fly upon the same corn-stalk with the chinch bugs. Upon close examination it was also ascertained that the plant was more or less infested with some aphid or plant-louse which had attracted these, their natural enemies, before the other bugs arrived. It must not be inferred from what I say here that I discredit the writings of such authorities as Thomas, LeBaron, and

others. Such is far from my intention. Various remedies, as plowing, rolling, ditching, fencing, and the use of insecticides have been suggested and used with mere or less favorable results, both in this and other States; deep plowing immediately after harvest having succeeded in a few instances by covering the bugs so deeply that they could not creep out. Rolling at a like season has crushed large numbers, while ditching and fencing have succeeded in "bunching" them, and for a time checking their onward movement while migrating from small-grain fields to corn-fields. At such times the dragging forward and backward of a heavy weight of some sort has been the means of causing great slaughter among their continually increasing ranks. Ditches into which water could be turned have formed complete barriers to their creeping migrations, but not to the after movements of the winged insects as they were

This insect, like all other depredators, has its likes and dislikes, and chooses its food-pi taste.

The small grains are the first on the list,

about to mate for the second brood.

after which follow some of the grasses and corn. Among the grasses Millet, Hungarian and Fox-tail stand at the head, while a few others that usually grow as weeds follow closely. Wild buckwheat is also quite a delicacy with them, and I have noticed several examples where weedy fields were less injured than clean ones, notwithstanding the fact that the one contained equally as many bugs as the other. Several farmers in this country have also mentioned the same tact to me. As a rule, grain in a grassy field has the disadvantage alongside of that growing in a clean one. During the past summer I saw several examples in which the scale was turned. One of these in particular attracted my attention at the time. The crop was corn, growing just across a road from a field of wheat which had been so badly damaged as to render its harvest useless. The ground was covered with wild Hungarian or Fox-tail grass, which at the time. August 6, was dead and perfectly dry for a considerable distance in from the road. Upon examination it was found that our old acquaintance was at work here, attacking the Fox-tail in preference to the corn. Referring to my notes made on the ground, I find the following:

"The chinch bug is still present in considerable numbers in a few corn-fields, but absent from others where there are signs of its work. In these a large per cent of the grass (Fox-tail) has been entirely killed before the corn was attacked. In no instance has the corn been greatly damaged, the only perceptible injury being in the drying up of a few of the lower leaves."

We had several heavy rains just prior to this, so the partial disappearance of the pest could very likely be attributed to that anse. Since that date but a few scattered specimens of the bugs have been noticed. Hence, I imagine our rains of August and September have been of great benefit in their diminution.

In conclusion, I would state that the only remedy that I know of is in clean farming -burning all rubbish in early spring that has not disappeared during fall and winter: also the protection of our winter birds.

In regions that depend largely upon irrigation for moisture, or such that are easily looded, there never need be any loss of crops from the depredations of this insect As to future possibilities of ir jury we can say nothing definite, as weather alone will decide the matter, a wet year preventing and a dry one favoring their increase in damaging numbers,

Williamston is not behind the State in the size of her horticultural products, if she is not the biggest city in it. Pea-pods five inches not the biggest city in it. Fee-poos live inches long, sweet corn seven feet high, grape leaves 16 inches across by 15 inches long, and fine large potatoes two months from the hill are a few of the stories told by the editor of the

AUSTRALIA.

Progress of those Colonies-Interesting Re port on the Wool Growing Industry.

The July report of the Agricultural Departnent contains a review of the pastoral and gricultural progress of the British Australian colonies since 1860, compiled from the official colonial statistics. The period covered includes years of progress unrivalled in history except by the advancement of the States of our Union, and which, as this report observes, have made these colonies the jewels of the English crown," and brought to light resources and possibilities far in advance of those of India. Despite their natural advantages and favorable con ditions, these Australian colonies are still the most thinly populated of any civilized countries; and notwithstanding the marvel ous progress of the last decade, are only in the first stages of the development of their great resources. The aggregate area of New South Wales,

Victoria, Queensland, South Australia, Western Australia, Tasmania and New Zealand is 3,075,238 square miles, an area greater than that of the United States, exclusive of Alaska; while the population, 8,426,562 persons, is less than that of the State of Pennsylvania. Victoria, the smallest in extent and largest in population, exceeds Pennsylvania, Maryland, West Virginia, New Jersey and Delaware combined in area, while in population she is exceeded by New Jersey alone. The Australian population is mainly productive, there being no privileged class of aristocratic landholders, few wealthy families living upon incomes from investments, and the criminal and pauper classes being no longer ture and stock raising are the main pursuits, other occupations are not unduly neglected, and manufactures, mining, etc., are increasing. Extending through more than thirty degrees of latitude, these colonies have a great diversity of climate, from temperate to tropic, and the lands are generally fertile. The principal crops continue to be wheat for export and oats, maize and potatoes for home consumption. . The wheat production after expanding rapidly in acreage for several years, has been checked by increasing competition and the difficulty encountered in reaching the world's market. Of the seven colonies, South Australia, Victoria and New Zealand are the only ones which produce more than enough of wheat for their increasing. The home demand per capita in Australia is estimated as being greater than in any other country except France. The largest production ever secured, that of 1883, yielded an excess of 9,000,000 bushels over the demands for home consumption. Since that time the surplus for export has declined in each of the three colonies which

are exporters, while the demand in each of

the others has increased.

The pastoral interests far exceed the agricultural in value and development, and the increase of flocks and herds since 1860 has been steady and remarkable. The wool and fresh meats exports have both rapidly increased. The stock-raising capacity of the colonies is yet far from being reached. According to this report, the injury done to the stock growing interests by the great number of rabbits overrunning the pastoral regions has not been exaggerated and is steadily increasing. In New South Wales the wool production has increased year by year, from 121,152,601 pounds in 1877 to 203.013.090 in 1886. The Merinos, which mainly compose the flocks, are being improved by the infusion of the best American and German blood, and the conditions are exceptionally favorable to the increase consumer. It says: "Such a hog must of sheep raising. In twenty-five years have a short head, heavy jowl, and thick Victoria has doubled the number of her short neck; ear small, thin and tolerably sheep, and now has nearly 11,000,000. The erect; but is not objectionable if it droops wool product there has, however, steadily slightly forward. It must be straight on the declined for the past five years. South bottom from the neck back to flank, let Australia has also doubled her flocks in well down to the knee in the brisket, and twenty-five years, and, with a pastoral area possess good length from head to tail; back of 300,000,000 acres, raises many varieties broad and slightly curved or arched from of wool. The production, which was 20,- the shoulder to the setting on the tail; ribs 000,000 pounds in 1870, has since doubled rather barrel-shaped; tail small. in amount. Queensland equals the other colonies combined in the number of horned to the letting off at the loin, and be broad cattle, and has 10,000,000 sheep; while the and full; shoulders not large, and yet suffiwool product varies widely, and in 1886 was clent to give symmetry to the animal; hair in 1884. New Zealand has steadily in elastic to the touch; legs short and small, creased in the number of sheep since the set under the body, and the space between first enumeration in 1858, and wool growng is the principal industry. The sheep flocks exceed 17,000,000 in number, having doubled in twenty years. The export has steadily increased until it reached 90,000,-000 pounds, but owing to the decline in prices has averaged about the same value for ten years. In Tasmania the pastoral or a mixture of the two. Such a hog will interests are steadily encroaching upon the agricultural, but the number of sheep is declining. Wool growing has largely decreased, while sheep-raising for breeding purposes and for meat increases. In reviewing the agricultural, pastoral and

industrial conditions of Australia, the report serves to emphasize the fact that in the development of these colonies the United States must find a great rival supplied with many of the advantages which have con- 1st, 2d and 3d. All swine breeders are intributed to our supremacy. According to this report, the climatic disadvantages and from this meeting they ought not to miss. sterility of soil are much less serious and Special railroad rates have been secured. L. widespread in their adverse influences than C. Nixon is President, ft. Ancient., O., has generally been supposed. Although and W. H. Morris, Secretary, Indianapolis.

handicapped by drawbacks in these respects and by difficulty in reaching the world's markets, there can be no doubt that Australia will steadily increase in importance as a contributor to the world's wealth, and that in the development of her vast resources she will exercise an influence only second to that of the United States as a producer of

the necessaries of life and an asylum for the

A Good Suggestion.

To the Editor of the Michigan Farmer.

outcasts of European lands.

I noticed with interest what your Oakland County correspondent has to say in reference to imported sheep; also your statement of what constitutes imported sheep, and think it a good time at the opening of the fall trade to have the matter well understood. I have sold some sheep, though I am sure I never yet saw the person who possessed average intelligence, or enough so he thought he wanted Shropshire sheep, who needed this instruction. But I have known of persons buying Shropshire sheep with the implied understanding that they were getting recorded sheep, or eligible, but which after purchasing were found to be neither. I think in connection with the above this last matter should be noticed. and dealers in Shropshire sheep should hold themselves above any chance for reproach on such a matter. Yours truly. W. J. GARLOCK.

Method of Holding Fresh Butter.

With reference to the holding of butters our method here is, during the hot months, to churn the cream until the butter comes in small granules, about the size of kernels larger than in other lands. While agricul- of wheat, when we draw off the buttermilk and wash the granular butter in cold water while it is in the churn, turning the churn a few times, then drawing the water off, and finally washing it with brine: then we take oak casks which have been previously scalded out with brine and thoroughly cleansed: place in the bottom of the cask a laver of salt, with a little saltpetre in it, then put in the butter, filling the cask to the top, then putting on a cloth and over the cloth a pailful of salt, then putting the head in the cask securely, driving the hoops down tight, finally pouring in brine through a small hole bored in the head until the cask is filled. The cask is then stored away in a cool place and watched for a couple of weeks, pouring in brine so as to keep it full, but when finalown use, while the population of the four ly it has taken up all the brine it will, we colonies which do not produce enough for drive a plug in the hole and let the cask rebutter; when we open the cask and take out sufficient butter to churn in the buttermilk that results from the churning of the cream on that day, and by churning this grapular butter in the buttermilk for a few moments. its flavor is freshened. Then we take the butter from the churn, work, salt and pack it in tubs as usual, and it is very seldom that the sharpest buyer can tell that this butter has not been freshly made. The tubs in which it is packed are fresh and bright, and there is nothing to indicate that it is old. and in fact it is fresh, because each of these butter granules has been surrounded by strong brine, thus excluding the air and re-

A Perfect Type of Pig.

taining the a:oma. - D. H. Burrell & Co.

To furnish a typical guide to farmers as well as to breeders, a committee of experts was appointed at the American National Swine Breeders' Convention to report on "A general standard of excellence for a hog which shall best meet the requirements of the market."

The standard adopted represents a perfeet hog most profitable to the farmer and

"The hams should be long from the back 29,000,000 pounds, compared to 47,000,000 smooth, and evenly set on; skin soft and wide; a good depth between the bottom and top of the carcase.

"The animal must be possessed of a good quiet disposition, and, as a general rule should not weigh more than 300 pounds or 400 pounds gross, at twelve to eighteen months old. Color may be black or white, measure as many feet from the top of the head to the setting on the tail as it does round the body, and as many inches round the leg below the knee as it does in length or round the body, and the depth of the

body will be four-fifths of the height." ---

The day was beautiful, and the mond ting. It may be of interest

THE National Association of Expert Judges of Swine will hold their next meeting at Indianapolis, Ind., July 31st, Aug. vited, as the benefits which may be derived

Perfect FORCE FEED

BRANCH HOUSES: Philadelphia, Pa.; Peoria, Ilis.; St. Pani. Seeders, Buckeye Cider

P. P. MAST & CO., SPRINGFIELD, OHIO.

MALLEY BUCKET CARRIER (1888 Patent) is the mat any angle from 40 to 8 degrees, and is the only perfe

NEW ADVERTISEMENTS.

Lubin Pulverizers, Buck.

Cultivators, Buckeye

Mills and Hay Rakes.

NEW ADVERTISEMENTS.

Agricultural Items.

THE Colorado Farmer thinks it does not pay

o spoil a valuable horse for the sake of making

A DAKOTA farmer has sixteen head of cat.

tle, the increase of two cows within four

A CORRESPONDENT of the N. Y. Tribun.

says a dark stable is as injurious to the health

of animals as is prolonged darkness to the

An Idaho farmer says he threshed out 60

bushels per acre-a gift of nature: for the

ground was neither plowed, harrowed nor

sown. But it is to be remembered that in

these virgin lands the weeds which make

their growth when wheat does, and so com-

pete with it and overcome it by growing fas-

ter, have not yet got their fatal footing. The

same person said there was a great deal of

wheat there that yields 40 to 50 bushels pe

PROF. FERNALD is certain that lands which

gen in barnyard or stable manures made by

feeding the clover to thrifty, profitable stock

THE American Daireman says there is one

dairy implement that is too apt to become an

heirloom in the family, and that is the churn.

We have often seen them that looked as

though they had come down from remote

ages past. Brown and weather-beaten and

worn to the bone, they presented a sorry ap-

pearance, and when dry the critical nose

could detect the remains of ancient greas

about them. Nothing could be more perilous

to the quality of the butter made in them

Ten years is a very long time to keep a churp.

even if it is cleaned with scrupulous care al-

ways after using. They do not cost much in

these days, and no matter what kind of wood

they are made of it becomes in time saturated

with the oil of the milk to that extent that no

amount of hot water can take it out. Age

makes this grease old and rank, and the odor

from it quickly contaminates the fresh cream,

NEW ADVERTISEMENTS.

especially while it is warm from churning.

years. He instances it as showing the profi

im wear out an old collar.

o be found in stock-raising.

growth of vegetables.

acre.



Dates of Trotting Meetings in Michigan for 1888.

THE BLUE RIBBON MEETING.

The summer meeting of the Detroit Driving Club opened on Tuesday last with fine weather, an excellent track, but only fair attendance, say 2,000 people. This is esually the case on a first day, and was generally expected. People appear to think the races on the first day of a meeting will not be interesting, and so wait for the succeeding days. But their expectations were disappointed this time, for there was a rattling good day's sport, and one event of sensational interest. This was the wonderful performance of Guy, the heretofore unmanageable black gelding owned by W. J. Gordon of Cleveland, who seems at last tr have been coaxed into trotting a mile without endangering the lives of his own or other drivers, or sulking on the track.

FIRST DAY. The judges' stand was occupied by Messrs. Ira A. Metcalf and Fred Moran, with President Campau as starter, and J. V. Campbell, Jr. and A. E. Brush as timekeepers. The appearance of the grounds, grand stand, etc., was so fine as to draw remarks even from the horsemen present, who have seen the finest tracks in the coun-

The first race called was the three minute class, with Guy, Editor, Genevra, Repetition and J. W. as the starters. It was known Gay could beat :20, but was so unreliable that he had never yet made a record. But the unexpected always happens. Guy acted badly at the start, and it required five attempts to get the horses off together. He took the lead at once, captured the pole at the first turn, steadily increased his lead without apparent exertion or urging, and won the heat and race, distancing the field, in 2:161/4. Editor was second, and by running the last quarter got inside the flag, but the judges put him back for running. The first half was trotted in 1:05¼, when he was allowed to slack up a little. It is doubtful if his driver wanted him to make the time he did, but when Guy was going he thought it best to let him take his own way, any other course being liable to produce trouble. When he makes up his mind to trot it is doubtful if there is a horse on the turf that can down him. His gait is perfection, and he gets over the ground without apparent exertion.

The next race was the 2:22 class, in which the starters were as follows: Edwin C., b. g., J. B. Shocking, Louisville; McLeod, b. g., G. A. Singerly, Philadelphia; Elmwood Chief, br. g., C. E. Abbott, Denver; William C., b. g., W. H. McCarthy, Lexington; Thornless, b. h., Bordwell & Shuler, Aberdeen, D. T.; Little Nell, b. m., S. H. Lewis, Watertown, N. Y.; Gen. Wilkes, gr. h., Edge Hill Stock Farm; Gene Smith, blk. g., Cook & Craig, Paris, Tex.; White Stockings, Bob Stewart, Kansas City; Lady M., John W. Boardman, Jackson,

The field was so large that a good star was very difficult. It took nine trials before they got off, and then Lady M. was far the front, got the pole away from Edwin C., and soon had a clear lead, and kept it until the stretch was reached, when Thornless and White Stockings began to trot in earnest, and the latter surely gained on the mare, and finally took the lead, winning by a length from her in 2:19, Little Nell secand and Thornless third, wellup. Lady M. brought up the rear.

White Stockings was now the favorite. At the start Little Nell again went to the front, on the first turn, with White Stockings second, Thornless third, Elmwood Chief fourth and the others bunched, but before the first quarter was reached the Chief back stretch Lady M. crept up to fifth place | The independent spirit of President Cam where she finished. Little Nell led to the last quarter, when White Stockings and her had a pretty race, the latter again taking first place, and winning the heat; time, 2:19%, Little Nell second and Gene Smith third.

It was now apparent White Stockings could win, barring accidents, and those who bought the field did not give much for it. He was second to Little Nell at the quarter. There Gene Smith, Thornless and the two leaders got bunched, and for a short distance there was a fine race, White Stockings coming under the wire first, Gene Smith second, Thornless third, and Little Nell fourth. Time, 2:1914. The following is the

White Stockings. Little Nell..... Elmwood Edwin C. Time, 2:19, 2:19% and 2:18%

The 2:25 pace was next on the day's programme, and the four horses starting were as follows: Mambrino Prince, blk. g., W. G. Harvey, Kansas Oity; Dr. M., b. g., Cogan and Grant, North Vernon, Ind.; Billy the Kid, blk. g., Low Bros. & Co., Havana, Ill.; Dr. West, br.g., C. E. Mayne, Omaha. They got the word the third attempt, and Dr. M. pushed to the front, taking the pole on the first turn and kept it to the finish. Dr. West, looked upon as the winner, behaved badly, breaking twice, and was nearly distanced. Mambrino Prince was second and Billy the Kid third. Time, 2:2014.

Dr. M. was now the favorite in the pools The horses got away on the first attempt, and Dr. West at once jumped into the lead. going so fast that he drove Dr. M. to a break, and captured the heat in 2:20, Dr. M. second, and the Kid distanced.

Dr. West was now the favorite in the pools, and captured the next two heats, the first in 2:21% and the second in 2:19%. The following is the

BUMMARY.

SECOND DAY. The day was beautiful, and the crowd ling. It may be of interest to some if we

double that of the previous day. The attendance was of the best class of citizens, and excellent order and good feeling was the rule all over the grounds.

The first race called was the 2:25 trot, in nati. The race was not even enough to be straight. The following is the

SUMMARY. Time, 9:24, 2:25, 2:2514.

The 2:18 trot had only two starters, Rosalind Wilkes and Loretta F., but it was a good race, and one the crowd appeared to appreciate. In the pools Rosalind was the Loretta F. is a bay mare, owned by C. C. Pond, Jackson, and was driven by M. A. McHenry; her record was 2:19. Rosalind Wilkes is a bay mare, owned by the Sire 2:18%.

They went off together for the first heat. and Loretta F. got the lead at once, and was two lengths ahead at the quarter. Rosalind went up to her wheel twice on the back stretch, but could not apparently hold the Wilkes mare continued the favorite.

The next three heats while hot ones, were each captured by Rosalind, although in the the defect referred to .- Prairie Farmer. last one she had to be driven out in 2:17% to win it. The following is the

Rosalind Wilkes.....

Then came the free-for-all pace, which was sharply contested from start to inish and very exciting. The starters were as follows: Little Mack, br. g., Geo. F. Case, he driving; Arrow, b. g., Budd Doble, he driving; Puritan, br. g., A. Kaul, St. Marys, Pa.; Dan D., b. g., C. E. Mayne, Omaha, Jim Newbro, driver; Gossip, Jr., b. g., Sire Bros., New York, Frank Van Ness, driver; Mike Wilkes, b. g., Abe Rohrback, Stillwater, Minn., he driving. Gossip was a slight favorite in the pools, with some backing Little Mack to take the first heat. At the start Little Mack went to the front like a shot, opened out a gap of four lengths by the time the quarter was eached, the others in a bunch and going fast. Little Mack turned into the stretch ahead, with Mike Wilkes close up, and they had it very sharp, but Little Mack got the heat by a length in 2:16%, to the delight of Detroiters, who velled like mad.

For the next heat Rohrback got down from behind Mike Wilkes and had McHenry take his place. It was seen that the heat would be a race in every way. At the start Little Mack took the lead, with Arrow close up, Dan D. third and Mike Wilkes fourth. Up the back stretch Gossip passed Mike Wilkes and kept on till he carried Dan D off his feet on the upper turn and took third place. The half was reached in 1:07 and the three-quarter in 1:41, with Mack, Arrow and Gossin bunched for first place. There was a hot fight down the stretch between Gossip and Arrow, with the former having the best of it to the distance stand, where he broke, and Arrow won by one and onehalf lengths in 2:14%, Gossip's time being 2:15, Mack third, Dan D. fourth and Puritan

distanced. Arrow was now the favorite in the pools, in the rear. Little Nell at once rushed to and though he was pressed close, took the next two heats in 2:151/4 and 2:161/4. Gossip and Little Mack did all they could, but in the last heat they showed signs of exhaustion, while Arrow and Mike Wilkes were apparently good for several more heats. The

following is the Arrow..... Little Mack. Time-2:16%, 2:14%, 2:15%, 2:16%.

Two days of the meeting are over, and it is safe to say it is a successful one. The class of horses present is exceptionally fine, broke and fell back to last place. Up the and the management most satisfactory. pau and his associate officials, while it has disgruntled such schemers as Messrs. John Spian and Orrin Hickok, has given the general public confidence that the meeting is to be conducted in a manner which will protect the public from barefaced robbery, and give the best horse a chance to win. The absence of Messrs. Splan and Hickok is a matter for congratulation among those who take a live interest in the improvement and reputation of the American trotter, and who dislike to see such an animal used simply as a means of defrauding the public. We wish these "gentlemen," as the sporting papers delight in calling them, nothing worse than that they wil continue to give Detroit a wide berth, and allow its horse interest to struggle along without the light of their winning ways and honest faces. For this result alone we think the Detroit Driving Club deserves high commendation.

We shall give a summary of the results in the other classes next week.

The Horse Bred to Stumble,

As a rule, there has not been the same degree of skill used in the breeding of horse as in the construction of steam engines, vet there are a hundred or more using the horse daily to each one using an engine. Thus, a horse is bred in the best possible shape for securing a stumbler, without ever a thought that this result will follow. The Morgan horse-now as a breed, or so-called breed, pretty nearly set aside—his form and peculiarities very nearly covered up and hid by repeated admixtures, every sort and form

having entered in—the Morgan was noted for the absence of tendency to stumbling. Now, this was not owing, as some would suppose, to any general characteristic or peculiarity; neither to any notion in the mind of the Morgan horse that he could travel easier or faster by lifting the knee well up when in motion, but on the other hand it arose as it only could, from the shoulder having a proper angle in place of being upright, and from the muscles of the forearm, viz: those that are placed on the front side of the foreleg, being well developed. This development, in connection with a shoulder of proper formation, will always insure such a reasonably high knee action as will give guarantee against stumbstate here that the muscle which perhaps more than any other, conduces to high knee action, is known as the extensor metacar; magnus. This is the muscle which aids in

giving fullness to the front of the arm. This which only two starters appeared. Roy, a muscle is attached above, just within the chestnut gelding owned in Chicago, and lower part of the shoulder, upon the outer Mulatto, a brown stallion owned in Cincin- and front parts of the external condyle of the humerus and its capsular ligament. exciting. Roy taking the three heats Below, through its tendonous end it is inserted upon the front of the leg-bone below the knee, this being known as the os metacarpi magnum.

It is often said of a stumbler that the fault comes of improper shoeing. This notion should always be declared against, for while we admit that if the toe be permitted to become elongated, it will, in favorite, at long odds, such as \$25 to \$6. minor degree, contribute to the tendency to stumble, yet the smith is an innocent party so far as stumbling horses are concerned. The evil takes origin at the coupling, as does the evil of low carriage of head or low car Bros., New York, and she had a record of riage of tail. It is with the horse as with a given piece of machinery, all may work capitally except one portion, and no satisfactory results are obtained until this part is remodelled. It is entirely within the province of the breeder to select at time for coupling, that any defect of the gait may be place. The Michigan mare kept the lead to | bred out. We do not say that any unskilled the finish, taking the heat in 2:19%. This novice can do this. It comes within the did not change the pools, however, and the province of the veterinarian, and if well up in his art he is presumed to be entirely able to order such mating as will do away with

Horse Gossip.

PARTIES in California are negotiating with Frank Wiethoff, of Detroit, for the purchase of his pacer, Silver Thread.

A special race has been arranged between Prince Wilkes and Clingstone for a purse of \$2,000, to be trotted at Cleveland during the meeting there.

THE trotter Billy Freer, well-known in this State, and once owned by Lapeer parties, made a mile in 2:18 in New York recently, and was sold at once for \$28,000.

THE great three-year-old, Emperor of Nor folk, has had the misfortune to injure one of the tendons of his leg, and it is feared he will

THE purses for the 2:18, 2:21, and 2:2classes on the programme for the Northwestern Breeders' Meeting, at Washington Park Chicago, on August 21 to 25, have been re duced from \$2,000 to \$1,500 each. The specia purse of \$2,000 will be free for all trotters.

THE Buffalo Driving Park Association has changed the free-for-all in its Grand Circuit meeting to a mile-heat race, best two in three and gives \$5,000 for the event. A \$2,000 purse for four-year-olds and under has also been substituted in place of the team race on the third day of the meeting. The latter ought to be an interesting one.

AT a trial race the other day over the Lexington, Ky., course, the thoroughbred filly Perhaps ran a quarter of a mile in 23% seconds, which is equal to the best time ever made by a yearling at the distance. At this rate the time for a mile would be only 1:33, while the best time for a mile is 1:39%.

S. A. BROWNE & Co., of the Kalamazoo Stock Farm, have sold to J.; H.; Needham, Plattsburg, N. Y., and for shipment to South America, the trotting stallion Endymion, by Dictator, dam, Maggie Easton, by Morgan Rattler, 2d dam by Mambrino Chief. Endy. mion is a black horse, nine years old, and has a record of 2:231/4. So far he has not proved a success as a sire, but his colts are hardly old enough yet to tell just what they will do. The price paid was not made public.

IT is stated that E. J. Baldwin, otherwise known as "Lucky" Baldwin, was the largest winner at the recent running meeting at Chicago. He captured \$31,567, the largest amount received by any stable of horses. J. B. Haggin, another Californian, came next, with \$7,200; the Chicago Stable, \$4,326; J. H. Thomp. on, \$3,885; S. E. Larabee, \$3,690; B. E. Petti \$3,825; Ireland Brothers, \$3,135; Bryant & Scroggin, \$3.612; Labold Brothers, \$2.665; Gray & Co., \$2,490; F. B. Harper, \$2,850, and Dan Honig, \$2,524.

They are getting the trotting fever in Ru rope, although it has not yet become epidemic. t is reported that the government of Italy will give \$11,000 in prizes for trotting races this season and for the encouragement breeding racing horses. This is the first mention of a government undertaking to aid in the breeding of trotters, although most gov. ernments of that continent aid the people in improving the breeds of horses raised by them. It looks as if the American trotter was to have a chance with the rest.

SAYS an exchange: "Hay and oats, admirable as they are, according to Professor Long. rank among the dearest of any stock foods and the farmer can try other materials which will do the same work for a great deal less money, and it is to his advantage to do so if he has a knowledge of the properties of food, and can mix them for himself." The above may be true so far as cattle is concerned, but when it comes to horses, hay and oats mus always be recognized as the best of foods-They give horses just what is needed to fit them for hard and continuous labor.

THE Legislature of Italy has passed laws for the regulation of horse-breeding. They enact that from and after the first day of January, 1889, private individuals will not be llowed to keep stallions for service unles they have been duly approved by the Minis ter of Agriculture, a restriction calculated prevent the use of unsound and unsuitable sires. Also that from the 1st of July, 1888, and during a period of eight years from this date, not less than 800 stallions shall be pur chased for the government stallion centers for which a sum of \$95,000 is allotted.

For years the market for Engines, Thres ers and Saw Mills has been in the hands of middlemen to whom the buyer has been cor pelled to pay large commissions, no part of which augmented the profit of the manufac-The Aultman & Taylor Company urer. Manafield, Ohio, which has for a series years led the market in the manufacture first-class goods of this kind, has now dete mined to sweep away all the middlemen commissions and give them direct to the buyer. This very commendable determin tion to at once deal direct with the purcha and to give him all the advantages the bush ness affords, which we understand range all the way from \$40 to \$500, should invite the careful attention of all thresher and saw mi men and establish an intinate and profitab

Che Farm.

Stacking Hay and Straw.

While it is much the best to haul into

A correspondent of the Baltimore America can gives the following practical advice on the above very necessary farm operation:

parns and barracks all the products of the farm, yet, in many cases, this cannot be butter lines intelligently something like an ione, and, therefore, it is desirable to stack. Stacks should be put up by those having experience, and such men command, in most farm districts, extra wages, and are hard to get, even then. 1 would advise every farmer's boy to learn to stack, and with one who understands his business, and learn of him by following his advice, and, after some days spent thus, making a small stack all by one's self. It may be a failure, as far as beauty is concerned; yet, if the attempt is persevered in, success will come at last. I well remember the first one I ever put

up. I got along well enough until near the top, when it took to leaning at an angle of about forty-five degrees, and then I propped it up for the night, being assured it would settle straight by morning. In the early worse, if anything the other way. I then took it down and put it up again under the guidance of an experienced stacker, for which advice I paid some two dollars, and, though it was laughed at for being out of shape, and some said it looked dreadful, yet it answered the purpose-it shed the rain, and when hauled away in mid-winter, very little damaged hay could be found. From that day to this, whenever necessary, I do my own stacking and ricking of hay and straw, and can, therefore, command my own harvesting; whereas, if ignorant of the art (for it is an art), I would be at the nercy of some one who, if he had the will, could stop all farm work, and that in the usiest season. An old man taught me, and I cannot do

petter than give it as near as I can in his own words: "Choose ground for a stack that is high and will carry off the water readily; get three good logs from the woods, ten feet long, lay these level upon the ground three feet apart; have some thirty or forty fence rails, set one rail deep in the ground, and lay the other rails in a circle around this rail-thus the hay will be off the ground, which will give free access to the air and keep it from moulding at the bottom. Now start the stack; set two good forkfuls next to the upright rail, and so on in courses until the limits of the rails are reached, which will make an even circle. Always commence stacking in the center and work outwards and keep the center full and well tramped. The stack should have the appearance of an umbrella when shedding rain, and it is built on precisely the same principle. When high enough and well rounded, a large canvas is thrown over it, and it is allowed to settle for a day or so, and if it has been well made according to these directions, it will settle pretty straight. It is then topped off with good long hay, handed up in small forkfuls to the stacker, and, when finished, tied down by two wires running from the ground over the top of the stack in opposite directions These wires keep the top in place and the hay top cannot blow off, and it will keep thus in good condition for a long time. By having a rail to set up in the center, the inexperienced has a guide to follow, and even to the experienced one it is of grea help.

We find it much better to stack only on stack in a place, and if necessary to have several stacks in the same field-to have them situated so far apart that in case of one being set on fire by lightning or from any ther cause, only one stack will be lost whereas, if built in a stack-yard, all would go, and thus cause quite a loss. Hay can be stacked much greener than it can be put in the barn, if plenty of salt is spread in layers, about half a bushel to a load.

Grass that has a great many weeds in can be cut before the weeds mature their seed, and can be stacked, thus using plenty of salt, and a most toothsome hay will be found ready at hand in the cold winter months for all kinds of stock.

Straw, at the time of threshing, should be stacked or ricked in the very best manner, as it is not only a very valuable product of the farm for bedding, but if nice and bright will astonish those unacquainted with the art of feeding, how cattle, though having an abundance of the best hay and grain, will, when allowed liberty, eat large quantities of

straw. Straw ricks, after they have settled sufficiently, should be retopped, and then well combed down, and if a day or so is spent thus it will pay all that it costs during the winter's feeding. It is a pleasure to drive through a farming community where these seeming little things are looked after, and taken in hand in time, and if we would look a little further, we would invariably find that it is just such farming that pays

Determining Fats in Milk.

Prof. F. G. Short, in the last bulletin of the Wisconsin Experiment Station, gives a new method of discovering the per cent of fat in milk. He says :

The possession of a quick, accurate and inexpensive method for determining the total fat in milk, simple enough to be used by persons of ordinary education who have not been trained in the chemical laboratory, is of the highest importance to all persons engaged in handling dairy products. The demand for such a method, if it can be found, is apparent on all sides, for without it a large amount of guesswork, if it cannot he characterized by the stronger word igno rance, must continue to impede our progress toward a higher standard in dairy matters Not only does the demand come from the butter and cheese factories where the need of such a method is keenly felt, but also there are loud calls for it from dairymen and breeders of dairy stock. The practical dairyman desires to keep only such animals as will yield a profit for the feed consumed. having no practical way of testing his cows except by setting the milk from each separately and churning the cream it produces he finds the method too tedious and requiring so much time that it is given up, and he proceeds along the old path, gauging the ability of the individuals of his herd by the apparent quantity in milk given and the

length of time a good yield is main-

off and although he may weigh the milk from each animal and keep careful records, he knows that this tells but part of the story, for it is quite possible that some individual in the herd giving the smallest number of pounds of milk during the year may have due her the largest total yield of butter fat, In order to weed out the herd and breed in exact knowledge of the butter production of each individual must be known.

of the method herewith described.

The process depends on the following facts: That when a mixture of milk and a strong alkali is heated to the temperature of boiling water for a sufficient time, the fat of the milk unites with the alkali and form a soap which is dissolved in the hot liquid; at the same time the casein and albumen are disintegrated and become much more easily soluble. After the heating has continued for about two hours the mixture of milk and alkali becomes homogeneous and of a dark brown color. On the addition of an acid the soap is decomposed, the fatty acids are set free, and rise to the surface, while the albumen, casein, etc., are first precipitated and then dissolved. The insoluble fatty acids, thus obtained, constitute very nearly 87 per cent of the total fat in the milk.

Level Culture of Potatoes.

A correspondent of the Indiana Farme writes that journal the result of his experiments in potato culture, as follows:

Several years ago, I became convinced that the old method of raising potatoes by continuous hilling up was erroneous, and in view of our dry, hot summers, radically wrong. It might have been a well enough the soil was too wet, before the ground had been drained. Then it was no doubt, that so from the numerous insects in them rather the hilling system as applied to potatoes, corn, and all manner of garden vegetables, originated, as a matter of necessity, the earth being too moist, in order to get the crops to grow above high water mark, so to speak. But now that necessity has passed away, the land is drained, and the moisture s no longer super-abundant. On the contrary, it is now an object to retain the the soil. moisture in close proximity to the roots of all our vegetables, instead of draining it away, by the old time process of hilling. Therefore, I determined to try level culture on the potatoes in my garden, as an experiment. So I cultivated them by spading up the middle spaces between the rows, deep and thoroughly; walking backward, as spaded, because that was the most convenient, and I thereby avoided stepping on the furnishes makes the soil too light and porous fresh spaded ground; thus leaving the mid- for winter wheat. The clover also furnishes dles perfectly loose and porous, without a footprint on their surface, ready to receive the latter at least can be put on at smaller and absorb all the rain and dew that fell. I cost in commercial fertilizers, and the nitrolaid them by in this manner, spading as close to the roots as I dared, so as not to disturb the roots, or break the small young roots. This last spreading was done tice than turning clover in as green manureextra deep, and left the middles well pulverized.

June, and by digging time an abundance of nice, large, smooth, well-rounded tubers and no little ones to bother with.

I have pursued the same plan ever since in cultivating potatoes, and have never failed to raise good, nice, large, mellow ones Early Rose, White Star, Burbanks, Beauty of Hebron, or some other early variety: planting in drills, dropping the pieces, cut pretty large, so as to get two or three good eyes to each piece, about a foot apart, gaug ing the distance by the eye, in shallow fur rows, and covering them with rich, loose,

Hungarian Grass,

lowa Agricultural College, says in the Prairie Farmer:

If sown thick so that the stalks are firm and leafy, and if cut when just headed out, and well cured, this makes hay almost equal to clover and timothy for cattle and milch cows. It is a rank grower, will produce from three to three and a half tons per acre on very rich soil. It is an annual. It should be sown on rich, firm, mellow soil, just after corn planting; lightly brushed in, and the ground rolled with a good field roller. In Ohio for years I found it a mos profitable crop. In Iowa last year on the college farm we found it a disastrous one It gives the very best possible ground for chinch bugs, which swarmed through it three generations in a single summer destroying it almost totally and greatly injuring the adjacent corn. From 45 acre we only got about five tons of hay, and that all from ten acres. Whether it will breed chinch bugs badly in an average season cannot tell, but they seem to like it better than they do spring wheat. When the crop is heavy it is a hard crop to cure, even harder than timothy and clover. It takes two full days of hot sun and wind to cure i properly, and considerable horse tedding or hand-turning. In my opinion it will be many years before any other winter feed will supplant these kinds of hay in States where they grow well and where the land is rich and comparatively low priced. In Wisconsin, however, and some more eastern States, ensilage is much used to supplement hay; and as a semi-succulent feed it is a most excellent aid, in producing a larg amount and good grade of winter milk and butter.

The breeder of dairy stock is no bette **GLASS FERTILIZER** Greatest Improve-ment of the Age. CENTER GEAR. No discussion will be entered upon at

this point as to whether or not the fat content is a fair guage of the quality of milk, for this is largely assumed by all who handle this can only be done by going on the stack it, and this standard of judgment will without doubt continue in the future. It is not saying too much that if any great advancement is to be made in dairy matters in the future, be it with a single cow or the whole herd, in creameries or cheese factories, such advancement will have its foundation upon a quick, accurate and simple method of total fat determination; if this cannot be found our progress is greatly delayed if not altogether impeded. At the suggestion of the director of this station, the writer some nine months ago untertook to see what could be done for the dairymen in this morning I got up only to find it leaning regard, and has since that time devoted his time largely to the discovery and perfecting

method, when the country was new, when Cutting the clover for hay and at once plow ing the stubble is in most cases a better prac-

The result was that I had an early crop of potatoes, large enough to use by the first of

since I adopted that plan, selecting for seed nellow earth, that has been well manured

Dr. W. I. Chamberlain, President of the

The potato beetle has been mere than usu ally troublesome in Western New York this season, according to the Husbandman. About twenty bugs to one leaf is said to be the pro-

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are said to be run out are very often rendered The AULTMAN & TAYLOR CO., Mansfield.Q. than from the poverty of the soil. He has known many cases where grass lands failing to yield a fair crop were broken up and cultivated for a time, and laid down again with but very small applications of manure, and yet a large hay crop followed for several years. He cannot rid himself of the conviction that many of these cases were due to the work of insects more than to the poverty of

THE American Cultivator says: There is still in wheat-growing sections some plowing up of sod for wheat; but rarely now is Zinc Collar Pad. have growth of clover above ground turned under. It is almost the poorest use that clover can be used for, to plow it under as a seed bed for wheat. It is expensive, and besides does not make a good seed bed. The excess of car bonaceous matter that the decay of clover may19:eow6t



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PEACH YELLOWS IN DELA-WARE.

In 1887 I spent the last part of August. all of September and the first part of Octo-

ber in Kent County, Delaware. My headquarters were at Clayton, Dover and Felton, but by excursions from these points I was able to examine the greater part of the county and obtain a very full knowledge not only of the extent and importance of the peach industry but also of the present distribution of peach "yellows,' which, in some respects, is very interesting. I found the disease almost wherever I went. There was great complaint and much gloomy foreboding. The disease was most prevalent from Smyrna to Wyoming and east to the bay, but even here I was repeatedly assured that the trouble had not been serious until within the last two years. During the summers of 1886 and 1887 the disease was observed to spread with alarming rapidity. It "spread like fire," to use a common but somewhat exaggerated expression. I made more or less careful examination in 75 orchards of all ages, on all kinds of soil, and embracing a total of several thousand acres. In suitable orchards I spent from one to several days and made the examination as exhaustive as possible. It was my special good fortune to see the disease in all stages, during the growing season, and to secure the cordial sympathy and co-operation of a great many neach growers, without which the inquiry would have been much less satisfactory. Principally from my "field notes," I summarize as follows: About Clayton and Smyrna "yellows" is in all, or nearly all, the bearing orchards. I do not recall any that were entirely free, and some were so badly diseased as to be of no value save for firewood. The orchards are numerous, almost every farm has from one to a half a dozen. On some farms, as many as 100 to 200 acres are devoted to peach orchards. The trees are of all ages, from those

set in 1887 to those over 20 years old. From

evidence obtained in the orchard. I judge

that "vellows" has been present in some

of them four or five years, while in others it

certainly first appeared in 1887. The judg-

ment was afterwards confirmed by the own-

ers. The disease occurs in bearing trees of

At Leipsic I saw many diseased trees

all ages.

and some fine young bearing orchards of large size which have been almost entirely ruined within the last two or three years. At Dover a number of orchards are entirely ruined and many others are in a fair way to be at an early date. In some of these the disease has been present for several years, but in a majority it first appeared in 1886 or 1887. Many orchards now affected were entirely free from it until 1887. Here also I found the disease in bearing trees of all ages. Speaking for all upper Kent, the north one-third, it may be said that the disease is in four-fifths of the orehards and in many of them to an alarming extent. I do not now recall a single orchard over three years of age, in which I did not find more or less affected trees. I heard of orchards free from it and I do not doubt that some such are to be found. This part of Kent produced but few peaches in 1887. In midvalent. In this part of the county there was ches, and I heard great complaint especially about Lebanon, Canterbury, Camden, Wyoming and Magnolia of premature fruit. I also saw a great deal of this sort of fruit. In some instances from one-third to one-half the crop ripened prematurely with great loss. In my judgment the disease is now present in threefourths of the hearing orchards. In many it first appeared in 1887, and in comparatively few could I discover either by examination or by inqury that it had existed for any length of time. Nearly all the trees indicate recent disease. However, in one orchard at Magnolia, which I did not exammine, the disease has been prevalent for a number of years, according to the owner's statement. I heard similar statements respecting one or two other orchards, but owing to lack of time did not verify them. In southern Kent, the lower third, the disease is less frequent. Many farmers, especially those living west and southwest of Felton, have never seen peach "yellows" and are entirely ignorant of its effects. Here I saw the disease in a number of orchards; but in no case were there many trees affected, nor was there any evidence of its having been present prior to 1887. In many orchards, which I could not examine, I was told by owners that the disease had not appeared, and in quite a number of others, I know from personal inspection that the disease was not present in 1887. During my stay at Felton peaches were being brought in from this region for shipment, and on several occasions I examined many loads without finding any "prematures." Mr. Wm. V. Smith, and other peach buyers then at Felpeaches had been brought in by the farm-

east and southeast of this place, the disease is in at least one-half of the bearing orchards. But in a majority of these orchards 1887. However, east and south-east of Felton there is abundant evidence in three orchards that "yellows" has been present several years, probably four or five, and ary suckers of one year's growth; in blacks, statements made independently by a half

dozen persons confirm this inference. I saw well marked cases of the disease as far south as Milford, both in the village and in the orchards north and west of it, and from reliable men had accounts of its but from what I saw and heard I have reason to believe that until 1886 this part of diseased trees in any one orchard.

one-hird of the county the reverse of this part of the county, I saw many orchards be- possible. Never throw manure under the plants and vegetables. This is my experi-

number of the trees in these orchards were still thrifty and in good bearing condition, many of them at the time were bent to the ground under the burden of healthy peaches.

I did not visit Sussex, but I am inclined to think that "yellows" has not yet appeared in that county, at least not to any extent. The evidence on which I base this inference is four-fold:

1. The fact that "yellows" prevailed first in New Castle County and later in Kent, and that as we proceed southward through Kent the disease becomes less frequent.

2. The fact that the disease does not oceur, at least to any great extent, in the Maryland counties to the west and the Virginia counties to the south of Sussex and that on the whole west side of the Peninsula, in Maryland, the disease first appeared in the north, and as in Delaware, shows a general tendency to move slowly from north to south.

3. The entire absence on the part of the growers and buyers, of any complaint about prematurely ripening peaches.

4. The explicit denial of its presence by representative growers in various parts of the county, men of intelligence and character who have seen the disease in Kent and New Castle and would know it at sight.

Nevertheless, the disease may be present n some parts of Sussex; and judging from the nature of its movement on the Peninsula, it is only a matter of time when there also it will become a serious hindrance to successful peach-growing, unless some method can be devised for keeping it in check .-Delaware Farm and Home.

Why Apples Fall Off when Small.

When an apple trees blows it frequently s so full of blossoms that if one in a hundred should become a mature apple the tree would neither be able to supply sap to bring them to perfection, nor bear the immense weight on its branches. So when the ap ples are set, the tree, by a natural instinct, on the principle of natural selection abandons such part of its crop as is least liable to mature and retains only so much as it has a probable ability to bring to maturity. Perhaps, soon after, was as the case this year, there comes a severe drouth and the growth of the whole crop is arrested, and some of them are attacked by parasites. Some of them, from their situation on the limb, have been more fortunate than others and have kept on growing. When the drouth is broken and the tree is supplied with moisture and is prepared to supply nutriment to the whole crop, those that have been stunned from whatever cause when the proffered support comes to them. are unable to avail themselves of it, but loosen at the stem joint and drop off. What are left on the tree are usually all that the tree can bring to a proper degree of maturity, so that the drouth and the falling off are really no loss to the crop, but rather a benefit to it. There ought to be in the orchard hogs or sheep enough to pick up all falling fruit, and thus aid in keeping the insects in check -Orange Co. Farmer.

Fruit Growing for the Canning Factories. At the late annual meeting of the Ontario Fruit-Growers' Society, held at Picton, Mr. Wellington Boulter, proprietor of the Bay of Quinte Canning Factories, Picton, contributed a paper full of valuable points for growers. All fruits for hermetically sealing require to be fully matured before delivering dle Kent the disease was scarcely less pre- at the factory. For all purposes of sealing -preserving its natural color, flavor, and shape—no strawberry will bring so much money at the factory, or sell for a better price after, than the old-fashioned Wilson's Albany. A cool, moist sand, or clay loam, is the natural home of the strawberry -not wet or springy; better a dry soil that would suffer in a drouth than a springy soil. The ground must be thoroughly tilled the season previous by a hoed crop, such as potatoes or beans, or a crop that will come off early in the season. Then plow as many times as possible before frost sets in, care having been taken to put on a beavy coating of manure before the hoed crop is put in-at least 30 loads to the acre. Get good plants from first growth previous setting, and particularly from a reliable grower who has kept his patch clean. The plant must be put in the ground as deep as possible without covering the crown. The small roots shooting out from the main roots of the plant must not be disturbed. A plant once firmly set must not be loosened. Cultivation must be attended to soon after the the plant is set. Hoe very shallow near it. Many hoe too deep near the plant, cutting off the small roots. The first six weeks the ground must be cultivated so that no weeds will show themselves; then very little labor will be required after. When ground is frozen cover plants with straw two inches deep, to keep ground from freezing and thawing with every change. The straw should remain till there is growth in the ground. The plants should not be allowed to grow under the straw. After all has been done as described, keep yourself and everything else off your patch until the berries are ready for picking: thus they will be clean. Strawberton, also told me that comparatively few ries that have to be washed before hulling are nearly worthless for canning. The same soil that will grow strawberries is good for East of Felton, toward Frederica, and raspberries, but should not be so heavily manured. A dark, red, firm berry is required, and the Cuthbert fills the bill. In blacks, the Ohios for early and Mammoth only a few trees are yet affected. Most of Cluster for late have done well, though the these trees became diseased during the year Gregg is some later than Cluster, and Souhegan and Tyler are earliest so far tried in this locality. Not many black raspberries

are required. For red berries, select ordinthe tips. Set reds in rows seven feet wide and eighteen inches apart. In setting out, run a deep furrow, pressing the dirt firmly about the plants, then finish by plowing two furrows on each side up to the plants, about the same as for corn. Keep the cultivator appearance in orchards which I did not moving between the rows. Tomatoes can visit. It is now said on good anthority to be profitably grown between the rows the be in one-half the orchards in that region, first season. Mr. Wallace Woodrow, near here, last year picked from 2,000 tomato plants grown in this manner 425 bushels of Delaware was almost entirely free from yel- ripe tomatoes, beside a large number of lows, perhaps entirely free. I saw the dis- green ones, which make splendid food for For no matter how carefully the operation

that any foul weeds it may contain may be ing. My cabbages are sown in alternate If he was going to set out 1,000 trees he the rows get too wide, as they would generair, which will detract much from the flavor. three feet high nip off the ends. Shoots will be had even by transplanting. spring out, then nip these off again; this will ensure a large and vigorous growth. The eld canes must be cut off at the ground | early as I could from coldframe-wintered every year, either after picking or early in plants. My head lettuce is sown thinly in the spring. The secret of success with raspraspberries. We cannot get enough of them. ground up early in the autumn and setting plants out in September or October or be fore freezing. In currants and gooseberries the supply has been limited; and so far there is little demand for grapes. In pears we can only sell Flemish Beauty, Clapp's Favorite, or varieties similar in taste. Bartletts are in demand; we have had to import them largely from the States. The demand for apples has grown large. The best flavored varieties are the best, as whatever flavor fruit contains when neeled is retained when hermetically sealed-unlike evaporated ap-

Aeration of the Soil.

Prof. E. F. Goff, of the N. Y. Experimen Station, says, in the N. Y. Tribune:

In the Mediterranean region the steen nountain slopes and hillsides are terraced for the culture of oranges, lemons and olives, and these terraces are held in place by rough stone walls, laid up without mortar or cement. Behind these loose walls, trees, shrubs and vines are grown with the greatest success, as they have been for centuries. A wealthy English gentleman who spends his winters at Mentone, on the shores of the great sub-tropical sea named above, thought to improve upon the customs of the country by building his terrace walls of stones laid in cement. But, to his surprise, his trees made a feeble, sickly growth, poor peasant neighbors growing behind dry and often dilapidated walls, were models of important fact in agriculture—the necessity of soil aeration to the healthful growth of ers allow their crops to be greatly, and often roots. The rear side of the loose and dry permanently, injured, or at least retarded, rubble walls was completely closed with a by overcrowding, because they lack the mat of finely interlaced root fibres from the nerve and judgment to pull up the superfruit trees growing on the terraces. This mat followed down the walls, clear to the | in N. Y. Tribune. base, and extended to a considerable distance, horizontally, in both directions. Thus a large surface was exposed to the beneficial effects of the atmosphere. Be hind the cemented walls, however, no such root development was found. The rootlets spread out somewhat beneath the surface of the narrow terrace, but failed to follow the walls downward. The cemented walls had shut out the oxygen, and there was no encouragement for root-growth. The trees were restricted in their nutrition, and a

depauperate growth was the result. In my experience in washing out roots of various plants at our New York Experiment Station, I have been often struck with the fact that the roots of crops spread out over the surface of the layer of soil that lies just speak highly of very many varieties. The beneath the plow-line, as upon a table. The roots are almost exclusively in the king of red raspberries was the Shaffer Colower three inches of the soil moved by the plow. The loose surface layer of soil corresponds to the dry rubble wall. Beneath it is the mat of roots. Every florist finds the mat of roots always close to the inner wall of the pots. If he uses a glazed eties like the Superb, which show up well pot the plants do not prosper, the roots being deprived of .the influence of oxygen. They are in the same condition as were the gentleman's trees growing behind the cemented walls. The moral is obvious. We must keep the surface soil loose. We are admonished to do this in order to prevent They would grow enormous crops if trellised evaporation, but this is but half the argument, as the illustrations to hand so clearly show. Nature in some mysterious way provides for her own aeration. Go into the woods where the soil supports a vigorous leaf weeping birch. The tree was upright vegetation and take up a spadeful of earth. It will be found fully as porous as the most to droop. The lemon verbena and the oxthoroughly cultivated field. The sod ground along an old fence, though not disturbed by rule the plants and flowers which grow to the plow for half a century, is always porous and friable. But in cultivated fields where we disturb natural processes, the soil becomes compacted, unless kept loose by tillage. How then can we expect a good sun. Pansies also, which like a shady, cool erop from a baked soil, or a good yield of place, do better in England. fruits from trees in land packed into a hardpan by cattle or swine? The same truth is illustrated in cities, where shade trees refuse to grow along paved streets.

Thinning vs. Transplanting. If compelled to follow all the teachings of of its charms for me. Take, as an instance, the oft-repeated advice to "transplant frequently, in order to produce stocky plants plant a Crawford. He had had 40 trees, with an abundance of fine, fibrous roots." Many professional growers may think no- The crop had sold for \$1.75 a bushel. thing of "pricking out" a few hundred thousand celery or cabbage plants. To me and to most amateurs this job is utterly distasteful, and I avoid transplanting whenever I can. A writer says he "got better celery from plants that had been transplanted once; they cost more, but were cheaper in the end." The reason is not because they were transplanted, but because they were given the room needed for full development in the plant bed. Crowding makes poor plants. Transplanting to a certain proper thinning in the seed rows would give of disagreeable hand labor, besides avoiding other disadvantages of transplanting. ease in bearing trees of all ages; but with cows, increasing the flow of milk. Clip off of transplanting is performed, it always one or two exceptions, I did not see many surplus cane in August and September. In gives to the plant a check from which it autumn plow through the rows, throwing takes time to recover, and it always dwarfs cated up to appreciate them. The best time As a whole the bearing trees in southern the furrows towards the plants. In spring the plant. Cabbage, lettuce, celery, etc., Kent are still healthy, while for the north cultivate the land thoroughly as soon as fit, when left standing in the seed rows and hoeing frequently. Keep them clean now, thinned to a proper distance grow uninterstatement is true. In the center and south as when the rows get matted it is almost im-

destroyed by the cultivator. The more you rows with radishes, spinach, lettuce or other would set out 900 Early Pritchards. He hoe and dig around the red raspberry the fast- quick-growing vegetables (which can be liked the new Lieb, and preferred the Early er it fills up in the rows. As soon as berries cleared off in time to make room for the Gwynn for an early bearer. His soil was a begin to form, quit cultivating if season is cabbages), using only seed enough to have likely to prove dry. Using clean straw is but very few plants to the inch. By liberal advisable for mulching. Your ground kept use of mineral fertilizers (phosphates, ashes) clean, your patch is good, by digging oc- and an occasional light application of nitrate casionally with a potato fork some of the of soda, the plants are pushed right along old canes out, for any length of time. After and made large and stocky, The maggots second year cut out the canes that bore often take part of them and thin quite as soon as berries are picked. Do not let largely; but there are always enough good plants left for a full stand, besides a choice ally get so rank as to exclude the sun and lot to spare for sale or to give away; or to plant, if desired. These plants are first-In blacks, as soon as new growth goes about class every way, and I doubt if better could

By sowing very early I can with this

treatment raise early cabbage nearly as

rows and thinned to about one foot apart. perries is cultivation. It will pay to grow I get a full supply quite early, and finer heads would be hard to get. Celery might Many have succeeded well by fitting the be grown in the same way, and sometimes I so manage a small patch, but it is generally preferable to utilize the land for the production of an early (preceding) crop. So I sow thinly in rows, as I do other close-planted vegetables, without covering the seed, however, and merely pressing it into the soil with the feet while walking over the rows. Where the plants come up thicker than desirable the rows are narrowed by holding the forward blades of a Gregory fingerweeder closer together and cutting out the plants where needed. Sometimes I follow this up, slashing into the rows with a convenient hand-weeder, until the plants stand as thinly as I wish. The novice is apt to leave too many plants, as they do not appear to be crowding while yet small. A smaller number of first-class plants is always better than a large quantity of crowded, spindling things. The formation of a long taproot may be prevented by running the sharp blade of a hand-weeder (Lang's or Hazeltine's) along under the rows of plants, cutting the ends of taproots off squarely; yet this is not an absolute necessity, as fine celery can be raised from well-grown plants with fully developed taproots. Both root and top must be shortened in, however, when setting the plants. This system of management gives me as fine plants each year as any one could desire, and I give all credit for this achievement to an abundance of mineral elements of plant food in the soil, and bore miserable crops, while those of his and especially to plenty of space allotted to each plant. I find thinning better and easier than transplanting. The advantages of health and productiveness. The removal of early thinning in the vegetable garden—with some of these walls brought to light a most | beets, carrots, radishes, lettuce, etc.—are not adequately appreciated. Many gardenfluous plants while yet small .- T. Greiner

A Raspberry Meeting.

The Grand River Valley Horticultural Society met at Grand Rapids at the residence of Capt. Coffinberry, on the 17th, about 30 members present.

Raspberries was the general topic of the meeting. President Garfield had on exhibition a handsome display of raspberries from Burton farm, which were much admired. The berries were of several varieties, the Shaffer, the new colossal cross between the ed and the black families, making a large rortion of the display.

S. S. Bailey, of Paris, sp ject of raspberries. He has been raising berries for two years, but he could not Turner and Cuthbert are well lixed. The lossal, which would yield more berries on a small patch than you can use. Among the blacks there are the Tyler and Souhegan which are so much alike that when you buy one you have both. There are other varienough some times and not well the next season. The Shaffer bushes grow very high, some as high as 10 feet. The berry is the largest of any variety of the raspberry. For canning they are unexcelled. They would be just the thing for a small piece of ground. up with wire.

Mrs. Evelyn Arnold read a very interesting paper on "Horticulture in Suburban Homes." The best lawn tree was the cutuntil the third or fourth year when it began eye daisy were great favorites. As a general the best advantage in this country were those which require a great deal of heat and light. The rose and the rose tree did not do well here, there being too much light and

Mrs. Sarah Smith spoke of roses. In reply to inquiries she said that the most popular roses were the Jacqueminot, Rothschild and three or four varieties of moss roses. The Madame Plantier was a very useful white variety.

The discussion meandered to peaches. modern writers, rural life would lose many Mrs. Emmons asked Rev. John Saylor what was the largest amount that a Crawford tree would bear. His advice was not to from which he picked four bushels each.

> J. A. Pearce had had a bogus late Crawford which had yielded six bushels one year and seven and one-half the next, It had a crop every year and the peaches sold for \$2.50 a bushel. He thought that Crawfords were not so bad as Mr. Saylor had charged, but that there were better varieties than the Crawford.

Fred. Brown, of Walker, spoke upon raspberries. He raised raspberries for his bread and butter. He began five years ago with Philadelphias, but gave them up after distance apart would remedy the fault; but a year. He then tried the Cuthbert and found them hardy and good yielders. He he same result with a much smaller outlay did not like the Greggs because they came too late. Out of the 50 Shaffers he put out 20 lived and are doing nicely. They taste better canned than any other variety. They are neither red nor black and it is necessary that the customer should be eduto set the plants out is early in the spring as the ground will work up mellow, but worms were sworn enemies of the raspberry

Chase Phillips, who has a cherry orchard tween 20 and 30 years of age. The greater rows. Keep it in the centre of the rows, so ence, and it has led me to shun transplant of 500 trees, gave some of his experiences.

sandy loam and his picking season commenced six weeks ago and would last till after the first of September.

Mr. Saylor made a report upon the display of raspberries and other berries shown at the meeting. The Society rose and gave a hearty vote of thanks to Capt. and Mrs. Coffinberry for

their hospitality. The next meeting will be held at the hous of L. C. Woodman, in Walker township, the second Tuesday in August. It will be the peach meeting.

Horticultural Items

New home-grown potatoes were in market at Benton Harbor on the 20th, at \$1 per bushel.

An Orange County, N. Y., farmer sprayed his plum trees with London purple and re-

ports a fine grop of fruit in consequence. St. JOSEPH and Benton Harbor shipped 12,000 cases of raspberries to Chicago on the

16th. Later shipments were nearly as large. C. A. GREEN advises those who mean to plant trees, vines or plants this fall to begin to prepare the ground now by keeping down weeds and grass, so as to ensure a clean

THE grass should not be allowed to grow around young trees after being planted, as stunts their growth. The ground should be kept clean and loose around them until, at east, they are of bearing size.

stand.

THE South Haven Messenger says: Mr. Wm. Chase, of Ganges, has in his dooryard an apple tree, of the Red Astrachan variety. which is 53 years old, and from which he sold 80 bushels of apples, two years ago. It is full again this year.

MR. TAYLOR HANCE, according to the South Haven Messenger, has originated a new rasp berry, a cross between the Gregg and Mam moth Cluster, which is said to be of excellen promise and to bear more freely than the Gregg.

J. M. HUBBARD says the Keiffer pear is in dayor totally different from any pear he even tasted, having more savor of quince than of the different opinions regarding its value. He thinks it as desirable as the Duchess, how ever.

TWELVE thousand crates of choice Florida fruits were dumped into the harbor at New York recently, to prevent a glut in the maret and keep up prices. And this when there are thousands of poor people in that city who cannot afford to taste fruit except as a choice luxury, if indeed they ever do.

DURING the thunder sterm two weeks ago lightning struck a trellis wire in Montelle Winans' vineyard and killed all the vines at tached to it for a distance of forty rods. The damage was not noticed at first, but wilting of the vines in that row caused an investigation, when the cause was determined.—Benton Harbor Palladium.

THE Orange County Farmer says: For years past we have practiced tying up lettuce heads, when they grow to be of fair size, in order to blanch them and improve their quality. It is a work requiring very little time Fold up the leaves one after the other in their order of growth, beginning at the centre, and then draw them together at the top, tying about ten days or two weeks the head will be almost as compact as cabbage and nearly as white as blanched celery, and of course,

It is surmised one J. M. Bain, who has worked an incubator swindle quite success. fully, is at the back of the new "Jewe gooseberry tree" which is being peddled in Ohio and advertised as a horticultural neces sity. It is needless to tell men who read the papers that the gooseberry bush don't grow to be a tree, and that their safest way is to let it severely alone. And people who will not read and inform themselves deserve to be swindled-and generally are.

Warm weather often causes extreme tired eeling and debility, and in the weakened condition of the system diseases arising from impure blood are liable to appear. To gain strength, to overcome disease, and to purify, vitalize, and enrich the blood, take Hood's Sarsaparilla.

Apiarian.

Superseding Old Queens.

O. O. Poppleton, in the Canadian Bee Journal, gives his opinion on the age which queens should attain before being superseded. He has kept a record of his queen which enables him to speak on the subject without guesswork, and says:

I soon noticed that those colonies whose queen was in her fourth season nearly always gave me less than the average amount of honey and enough less, too, to much more than pay for the expense of having given them young queens the fall before, and allow largely for the value of such good queens as might be killed while doing so. never killed all of my third-season queen although I think it would have paid to do so; but I always kept a few of the best ones, so I have had both kinds of queens to compare results from a number of years.

A colony which is very strong at the com mencement of the honey-flow, will store more honey according to its numbers than will a medium strong one, and only queens in prime vigor can get their colonies strong by the time white clover commences to yield; and even if old and yet good, they are rarely ever as vigorous as are the younger ones; and my main reliance for surplus honey was always on those colonies having queens in their second or third sea-It is quite a long while from the time

brood-rearing ceases in the fall and the first of July following; and any failure of the queen during this time, even if only partial, seriously diminishes the number of mature bees the hive will contain during the honeyharvest, and ne failure of a queen can take place during this time that can be noticed by the apiarist soon enough to prevent a serious reduction of the amount of brood that will be raised in time for the harvest. A much larger proportion of colonies hav-

ing old queens will be weak in the spring

NEW ADVERTISEMENTS.

NEW ADVERTISEMENTS.



than of those having larger queens; and as re-queening can be done so much cheaper and better in the fall than in the spring, I prefer to do it then even if half the queens l lestroy would be good for yet another year. In speaking of old queens, I mean those that have done duty for three seasons, including the one in which they were raised. In rare cases I have known queens to do duty the fifth season; but a very large proportion will not do very satisfactory work during their fourth season, a much larger proportion than many suppose is the case, unless they have specially observed this point for a number of years.

As already said, the question is one of relative profit and loss. On one hand we have the expense of the young queens, and the value of the few good queens that will be destroyed; on the other, we have the very material shrinkage of the honey crop, the probable loss of some colonies, etc., and there is no question in my mind that the last items exceed the first ones many times over.

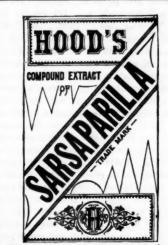
J. M. HICKS, of Indianapolis, strongly ecommends the sowing of a patch of silver hull buckwheat, for the double purpose of buckwheat cakes for a winter breakfast and honey to eat on them.

BEE-KEEPERS say that honey from apple lossoms is the purest and clearest derived from any flower. It will run like water. Honey from golden rod and asters is regarded as the most inferior.

A CANADIAN bee-keeper complains that the insect known as "mosquito hawk," 'spindle," and "devil's darning needle,' has a bad habit of catching and eating bees He has watched them at work in his apiary. pear. This, he thinks, explains the reason of and is convinced that they deserved to be ranked as one of the pests of the apiary.

> By giving bees too much room in the brood-nest they soon build more comb than the queen can fill with eggs, then they will build drone-cells intending to provide stores for winter use; but when the queen has filled the worker-cells with eggs, they will commence to lay in the drone-cells, and then instead of workers, we shall rear a lot of drones, to eat what the workers provide The bees seem to tolerate an over-production of drones in the honey season, but as soon as the harvest is over, they are driven from their homes, and perish by cold and hunger.

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Hood's Sarsaparilla pecul-lar curative powers. No To Itself other medicine? "such a record of wonderful cures. If you have made up your mind to buy Hood's Sarsaparilla do not be induced to take any other instead. It is a Peculiar Medicine, and is worthy your confidence. Hood's Sarsaparilla is sold by all druggists. Prepared by C. 1. Hood & Co., Lowell, Mass.

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55 to 88 a Day. Samples worth \$1 50, FRBE Lines not under horse's feet. Brewster Safety Rein Holder Co., Holly, Mich.

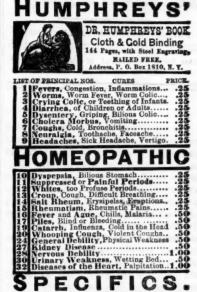
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This Paper is Entered at the Detroit Post whose as second class matter.

WHEAT.

The receipts of wheat in this market the past week amounted to 66,321 bu., against 22,980 bu. the previous week, and 426,042 bu. for corresponding week in 1887. Shipments for the week were 16,209 bu. against 48,349 bu. the previous week and 253,771 buthe corresponding week in 1887. The stocks of wheat now held in this city amount to 129,204 bu., against 129,345 bu. last week and 386,819 bu. at the corresponding date in 1887. The visible supply of this grain on July 21 was 21,644,810 bu. against 22,418,-484 the previous week, and 31,751,051 for the corresponding week in 1887. This shows a decrease from the amount reported the previous week of 773,674 bushels. As compared with a year ago the visible supply shows a decrease of 10,106,241 bu.

The new crop is beginning to arrive in considerable quantities, and as it gets dried out the premium paid for old begins to lessen. This is noticeable in No. 1 white, which has been very scarce and held three or four cents above No. 2 red. It has declined 1%c during the week, while old No. 2 red is quoted at the same figures. But white wheat of good quality is likely to command a premium, as the area where it was once grown has been greatly decreased. Michigan should always grow a good white wheat. Her soil and climate are admirably adapted for that purpose, while but few of the wheat growing States are. The demand is increasing, and we look for white to command a premium over red varieties all the ing year. Those who have held on to the Clawson will have no trouble selling

The week closes with a fairly strong market, and spot at about last week's prices, while futures are higher. The prospects are generally more favorable to holders. Chicago was firm and higher yesterday and cables were stronger. The demand for ex-

The following table exhibits the daily closing prices of spot wheat in this market from July 2d to July 27th, inclusive:

awa5		No. 1 White.	No. 2 Red.	No. Red
July	2	8914	86	
84	8	9014	8614	
44	4			
66	5	91	8614	
	6	9134	86%	
40	7	91%	8614	
64	9	91	86%	
64	10	91	86	
4.6	11	****	86	
64	12	91	87	
66	18	91	8614	779
64	14	91	8614	
	16	9134	87	
66	17	9114	8734	
64	18	9214	87	
44	19	9814	87	***
44		9256	88	***
44	21	92	85	***
44		98	84	***
64	23			***
44	24	9116	834	***
64	25	911/6	85	***
	26	91	841/2	***
44	97	993/	QK	7/0

The quotations above are for old wheat New No. 2 red is selling at 85c, and No. 1

For No. 2 red the closing prices on the various deals each day of the past week

were as follows:			
6277	July.	Aug.	Sept
Saturday	85	8834	84
Monday	84	8834	883
Tuesday	8314	821/6	. 883
Wednesday	84	88%	84
Thursday	8414	84	884
Triday	841/2	8414	843

Future sales are all of new wheat. No. 1 white for August is quoted at 841/4c per bu. 1887. The visible supply of this grain on dry, warm weather so essential to the successful blooming and earing of the wheat corresponding date in 1887. The visible crop the weather has been wet and unsettled. Much will depend upon the weather from for the week indicated. Stocks held in now to harvest, but the probability is that the harvest will be three weeks late, and it may fairly be questioned if the crop will equal that of last year. In its last weekly are steady for spot on account of light rereview of the market the Mark Lane Ex- ceipts and stocks, while futures are a little

The continuance of bad weather hardened the trade in native wheats. In the provincial markets prices advanced 6d@1s. The sales of English wheat for the week were 24,977 quarters at 32s per quarter, against 24,196 quarters at 34s 4d per quarter for the corresponding time last year. County for the corresponding time last year. flour is firm at 6d advance. Foreign wheats are steadier at a rise of 3d. At Liverpool prices are 1d per cental better. Foreign flour is 3d better."

Iu France the weather has continued decidedly unfavorable for wheat and other cereals, causing increased complaints from farmers throughout the country. Violent storms, accompanied by rain and hail, have done much damage in the north, east and centre. The nights are cold, the ground is up to expectations. No. 2 mixed spot are The wheat ears are generally short, and the flowering was indifferently effected, the heavy downpour of rain having beaten off and futures, with prices generally lower on at 46s. 0d. per cwt., a decline of 1s. 6d. per the bloom. The reports say that the fields all grades except fancy white, which cwt. from the prices quoted last week.

onceded that the crop will net, in any hectolitres, and while much depends upon the weather from now to harvest, it seems probable that the deficit, compared with last rear, will be at least 10 per cent. Some stimates make the shortage even larger.

In Germany the weather has been favorable for the crops, and even rye begins to show signs of some improvement, though the crop cannot be otherwise than short. Prices have risen in the interior so as to admit of imports, in spite of the high duty, but with better outlook for the crops, the demand has been restricted.

In Austro-Hungary the condition of the wheat crop shows further improvement. One of the largest flour mills in the world, ocated near Pesth, Hungary, is reported to

have been burned, with more than a million bags of flour.

The following table shows the quantity the United States, Canada, and on passage to Great Britain and the Continent of Eu-

rope: Visible supply On passage for United Kingdom On passage for Continent of Europe.	Bushels, 23,031.727 17,800,000 3,712,000
Total bushels July 7, 1888 Total previous week. Total two weeks ago Total July 9, 1888	44 543,727 47,367,989 48,294,533 55,371,190

The estimated receipts of foreign and ome-grown wheat in the Euglish markets during the week ending July 14 were 215,800 bu. more than the estimated consumption; and for the eight weeks ending June 30 the receipts are estimated to have been 1,354,720 bu. less than the consumption. The receipts show a decrease for those eight weeks of 1,800,884 bu. as compared with the corresponding eight weeks in 1887.

Shipments of wheat from India for the week ending July 14, 1888, as per special cable to the New York Produce Exchange, aggregated 680,000 bu., of which 280,000 was for the United Kingdom and 400,-000 to the Continent. The shipments for the previous week, as cabled, amounted to 940,000 bushels, of which 720,000 went to the United Kingdom and 220,000 to the Continent. The shipments from that country from April 1, the beginning of the crop year, to July 14, aggregate 14,700,000 bu., about equally divided between the United Kingdom and the Continent. The wheat on passage from India July 2 was estimated at 5,736,000 bu. One year ago the quantity was 75,552,000 bu.

The Liverpool market on Friday was quoted dull with poor demand. Quotations for American wheat are as follows: No. 2 winter, 6s. 61/d. @6s. 71/d. per cental; No. 2 spring, 6s. 6%d. @6s. 7%d.; California No. 1 68. 71/d@68. 81/d.

CORN AND OATS.

CORN

The receipts of corn in this market the past week were 11,471 bu., against 10,485 bu. the previous week, and 5,286 bu, for the corresponding week in 1887. Shipments for the week were 19,036 bu., against 7,115 bu. the previous week, and 479 bu, for the corresponding week in 1887. The visible supply of corn in the country on July 21 amounted to 8,389,857 bu. against 9,332,-091 bu. the previous week, and 7,884,209 bu at the same date in 1887. The visible supply shows a decrease during the week indicated of 942,234 bu. The stocks now held in this city amount to 24,278 bu. against 37,823 bu. last week, and 1,829 bu. at the corresresponding date in 1887. As compared with a year ago the visible supply shows an increase of 505,648 bu. Corn closes quiet and steady, with prices lower than a week ago. No. 2 is now selling at 46 %c for spot. while some sales for December delivery were made at 89c. This is a low price for corn, but dealers are predicting a heavy drop if the growing crop matures in good condition. Upon the whole the crop is progressing well all through the corn belt, and while it will be a little late in this State, we look for an excellent crop if frost holds is light in all markets. At Chicago yesterday the market opened rather weak, but firmed up and closed above the figures of the previous day. The feeling is generally steady. Values are lower than a week ago. Latest quotations in that market yesterday were 45c for No. 2 spot, 45%c for August delivery, 45c for September, and 44%c for October.

The Liverpool market on Friday was dull and demand poor. The following are the latest cable quotations from Liverpool: Spot mixed, 4s. 6d. per cental. Futures: August delivery, dull at 4s. 6%d.; September dull at 4s. 7¼d. per cental.

The receipts at tais point for the week were 11,568 bu., against 36,373 bu. the previous week, and 36,923 bu. for the corresponding week last year. The shipments for the week were nothing against nothing the previous week, and 5,281 bu. for same week in In the United Kingdom, in place of the July 21 was 3,052,783 bu., against 3,468,329 bu. the previous week, and 1,971,667 at the supply shows a decrease of 415,546 bu. store here amount to 12,594 bu., against 14,581 bu. the previous week, and 23,766 bu. at the corresponding date in 1887. Oats weak in sympathy with western markets. In this market No. 2 white spot are quoted at 37c, against 371/4 a week ago, while No mixed are quoted at 35%c against 35c last week. Old oats will be at a premium for some time after the new crop begins to come in, as green oats are not a safe article of diet for horses. In futures No. 2 white for August delivery are quoted at 28c, and September at 29c; No. 2 mixed for August delivery sold yesterday at 25c. The Chicago market was doll and weak, and spot de clined a little. Trade was light, and the demand for futures kept the various deals about steady. A big crop is looked for this season, and the yield so far as reported is saturated, and an immediate return to quoted at 29% @30c, July delivery at 29% c, warm, dry weather is anxiously desired. August at 241/4c, September at 231/4c, and October at same figures. The New York

market yesterday was firm on both spot

are thin, and the deficiency will not be are unchanged. Quotations in that market made up by well-filled ears. It is generally are as follows: No. 2 white, 40@42c; No. 3 white, 39%@40c; No. 2 mixed, 86@ event, reach the average of 103,000,000 36%c. In futures No. 2 mixed for August delivery sold at 30%c. September at 29%@ 29%c, and October at 29%@29%c. Western sold at 44@48c for white, and 35@38c for mixed.

DAIRY PRODUCTS.

The market is good for choice butter, but ordinary stock is seldom wanted, and as it comprises the bulk of the receipts at present it follows that it is accumulating. Dairy is in good demand where the quality is all right, and 16@17c is readily obtained for the best, but for ordinary to good 13@15c is quoted, and common stock sells at 10@12c. For creamery the demand is only fair, but it holds steady at 18@20c. The weather has also been against the market; and adds to the difficulty of selling anything that is not of wheat "in sight" at the dates named, in first class. The Chicago market is also dull, with values tending downward except on the choicest grades. Buyers were holding off and there was an accumulation of stocks, with medium and low grades especially dull. Quotations: Fancy Eigin creameries, 19@ 19%c per lb.; fine Iowa, Wisconsin and Minnesota do, 171/@181/c; fair to good do, 15%@17c; fancy dairies, 15@16c; common to fair do, 12%@14c. The New York market has held up all week, but appears to be weakening through large receipts, which are filling up storage room and unsettling the market. The Daily Bulletin says:

"The general market presents a decidedly dull and discouraging appearance. Westn creamery is in lighter supply to-day, but invoices are liberal, and, with an immense cumulation here, holders are anxiously seeking an outlet in all directions, and nedium to good quality, of which bulk of offered, but without stimulating any inhave taken some lots at 15% @16%c, but not enough to have any influence, and in fact most shippers claim to be unable to obtain any answers to their cables. The weak, un-settled feeling in under grades is tending to drag down the finer grades, and we hear of more urgent offerings and occasional shading even on strictly fancy grades. State creamery pails are easy, and 21c the top for finest that are in surplus of the grocery trade. State dairy dull and weak. Imitation creamery, Western dairy and factory, are all slow and tone weak and irregular."

Quotations in that market yesterday were as follows: EASTERN STOCK.

Creamery, State, tubs, fancy 20 (20) Creamery, Western, fancy 194/@20 Creamery, prime 175/@18 Creamery, good 16 @16 Creamery, fair 144/@15 State dairy, tubs, fancy 3 State dairy, tubs, fancy 16 @17 State dairy, tubs, fair 16 @17 State dairy, Welsh, prime 17 @18 State dairy, Welsh, fair to good 16 @16 WESTERN STOCK. WESTERN STOCK. 194/@20 Creamery, Eigla, fancy 194/@20 Creamery, Eigla, fancy 194/@20 Western Creamery, ancy 194/@20 Western dairy, fine 15 @15 Western dairy, good 184/@16 Western dairy, ordinary 184/@16 Western factory, tubs, June choice 144/@ Western factory, June choice, firkins 15 @		
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Western factory, prime 14 @145	Western factory, June choice, firkins	
	Western factory, prime	14 @1414
	Western factory, ordinary	11%2013

The market is quiet, and under the reports of weakness both east and west, a decline would not be unexpected. Still

quotations are unchanged, and something may occur to relieve the pressure in New York and Chicago, and stop the decline which has begun at those points. Full cream State are quoted at 9@9%c per lb., Ohio at 8@ 81/2c, and New York at 91/2@10c per lb. they are cheaper. Skims are selling at 5@8c per lb. At Chicago the tone of the market is weak and a decline of 1/6 1/6 is noted from the prices of a week ago. Speculators have for the most part withdrawn, and bids on export account have been reduced, with some buyers taking only moderate quantities; hence there is some accumulation of stocks. Quotations were as follows: Full creams, cheddars, 8 a profit. @81/c per lb.; do flats, 81/c; do Young America, 81/4@9c; poor to choice skims, 2@ 6c. The New York market has also declined, the drop being %c on fancy grades, and even more on some others. Cable reports are untavorable, and exporters have reduced their offers to correspond with the latest Liverpool figures. Still holders do not appear to feel discouraged, and those with fancy stock on hand are asking 9%c, and sometimes getting it. White is weaker than colored, and sells less readily even at lower figures. Skims are very dull, shippers asserting there is no market for them at present. Quotations in that market yesterday were as follows:

State factory, full cream, colored..... State factory, full cream, white...... state factory, good.
state factory, medium grades cream
state factory ordinary.
state factory, light skims.

The receipts of cheese in New York for the week ending July 17 were 94,504 boxes, against 104,289 the previous week, and 86,239 boxes the corresponding week in 1887. The exports from all Atlantic ports for the same week were 9,559,732 lbs. against 3,842,049 lbs. the previous week and 8,480,438 lbs. the corresponding week

in 1887. The exports of cheese from the port of New York since May 1st, the beginning of

pare as follows:	or un	e po	riou	116.	moo, com
					Exports Lbs.
For week ending Same week 1887 Since May 1, 1888. Same time last ye	July	24			4,835,90
Same week 1887 .					8,028,72
Since May 1, 1888.					27 677,78
Same time last ye	ar				29,289,71
The Montreal	Gaz	ette,	in it	8 ret	riew of the

"Holders of cheese here, much of whi ost pretty well up, are indifferent abou offering in the present state of the market preferring to abide the chances of another arn, which, in view of the erratic course of the market this season, would not be sur-orising. The cable has declined to 46s prising. The cable has declined to 46s under the influence of big shipments and weak advices from this side, besides which the fear of hot weather goods probably has some effect. The advices from the country show that there is not much danger of drouth, as rain has fallen extensively. Eas of here the production has been, and still is arge, and in excess of last year, but the ats from the west are more con

The Liverpool market on Friday was juoted dull for American white and colored

The market for the present remains in a very unsatisfactory condition, and is suffering under the reaction from undue and reckless speculation in which certain oper-

Improved tone in the eastern markets, conequent upon the arrival of the new clip and the better selections to which manufacturers have access. No apparent change is reported in values, except perhaps that old wools are ower, the new clip causing them to be neglected. Buyers are moving very cautiously, and will not buy largely even at concessions. The past year was full of sad experience for them as well as for dealers. They are not willing to take any more chances. The U. S. Economist estimates the loss to growers and dealers last year as fully twenty-two millions of dollars, and it is lost irretrievably. No wonder the trade handle wool very gingerly-they are afraid it is still loaded and liable to "go off" at any moment.

At Boston Ohio X wool is selling at 27@ 27%c, and Michigan X is held at 26c; but buyers quote 25@25%c as the best they can do. No. 1 Michigan sells at 30c, and No. 1 Ohio at 32@33c. Prices in the wool-grow ing States are above these figures when transportation and expenses are added, hence we look for considerable portions of the clips of Michigan, Ohio and New York to be held by the local buyers for a time, as they could not get out whole in some instances and sell at present range of values. The majority of the voters of the country. nowever, may decide that they shall have to ake less if they hold for a time. There is so much woolen goods being

imported at present, as shown by statistics from the Treasury Department, that, couped with the undervaluation of foreign wools, the bringing in of "tops," etc., under the name of "waste," the outook is not a pleasant one for the man who has put his money into wool, or the manu facturer who objects to swear falsely so as to bring in foreign wool at a low rate of duty. It is the swindler and the perjurer who are masters of the situation under the present condition of affairs, while the woolgrower, the dealer and the manufacturer The New York market is quiet, and fine

fleeces appear to be steady. Medium wools are not so strong under a limited inquiry, although prices are quoted as before. The new wools arriving are generally held above the views of buyers, and this tends to curtail business. Still, the record of sales shows some increase for the past two weeks. The Daily Bulletin says of the market:

"Trading has been without much growth thus far this week, and of the few sales learned of a goodly proportion were upon the conclusion of old negotiations. The market, in fact, is without elements calculated to lead to much animation, and while the wants of manufacturers may at times lead to some pretty good sales, there seems to be no faith in a continuous full demand be yond the filling out of mill assortments. The receipts of new fleeces is irregular and full as yet, with only a portion sorted up, but the samples received some at tention and dealers are hopeful that for a little while these wools will give them chance to work up some business. Texas and California wools are not moving out in quite so heavy blocks as a short time ago but the small invoices handled comman about former figures. Foreign carpet wools continue in good favor, especially such grades as can 'on a pinch' be used for cloth-

That last sentence shows just what ails the market. The duties are evaded by importing wools and passing them through the custom house as "carpet wools," while," 'on a pinch" they are used for clothing wools, supplanting domestic wools because

The editor of the U.S. Economist tells some plain truths in the following extract from that paper:

"Our wool market remains dormant and greatly depressed, and what is true of this market is true of all those from the Atlantic to the Pacific Ocean. No manufacturer will anticipate his wants to-day, simply because he cannot secure orders on which to realize a profit. The business of buying wool, making the cloth and selling the cloth in the piece or the garment is simply a guarded one to-day, and all are ready to pull up spoils and shut up or shut down, and go fishing, and all this is owing to the Mills bill before Congress, which proposed to admit wool duty free. We have seen Ohio fleeces bought it has ever been bought before. Over 30 sell a: 60c and 65c, and yet the manufactur ers pretend to say that wool is too dear, and hey cannot compete with European manuthem if they got the wool for nothing with out high duties, simply because labor and noney are ever far dearer in this land, and this is the outcome and essence of civiliza-

"If we want to lapse into barbarism all them, burn our mills, and live for a while on the insurances, send all our cotton abr and then go and raise wheat and corn fo the hungry paupers of the old world, while they make cloth to clothe our nakedness, if we have any money left to pay importers in the end an exorbitant price for their goods, when they are left without any competitors on this side of the big gulf.

"It would be passing strange if we could not do anything in this country that s done in any other if we only wished to. It is asserted that we cannot grow the classes of wool here adapted to the wants of nanufacturers, or that the manufacturers hemselves cannot make the classes o woolens the people require so well. Neither assertion is true. We can grow any sort of ool in this country; we can card it, we can pin it and dye it, and make it into vary or cloth as well as it can be done in any country, all things else considered. But if untry is to be made the junk shop o all the world, as it partly is now and surely was before the war, why then our people are too intelligent and well educated to go into the junk shop business to please anybody in competition with pauper labor. If we were in war with any European country and our ports were blockaded, the verity of these views would be brought to our gaze very soon. Every country should be self suporting, and the country and people that i ot remain ever in a state of dependence and degradation.
"No country can become permanently

happy and prosperous that is not self sup-porting and independent financially, com-mercially and economically. A country which, like the South, raises cotton and cobacco and ships it all away, and dep upon the North or Europe for goods, is no further advanced than in the colonial when all was barter or exchange.'

up from actual sales in the eastern markets: Ohio XX and above, 291/@30c; Ohio XX, 281/@29c; Ohio X,27@28c; Ohio No. 1, 32@ 88c; Michigan X, 25%@26c; Michigan No. 1, 30@32c; Ohio delaine, 30@32c; Michigan delaine, 28@29c; Ohio unwashed and nmerchantable, 18@22c; Michigan do., 17 @20c; No. 1 Ohio combing, washed, 35c; do Michigan, 32@33c; Kentucky and Indiana %-blood combing, 26@27c; do %-blood combing, 24@25c; Missouri and of course opposed to its passage.

blood combing, 23@24c; Texas fine, 12 months, 18@20c; do fall fine, 13@15c; do will be the sales department for live stock.

Upon the whole there is a somewhat months, 17@ 9c; do 6 to 8 months, 15@17c; do medium, 12 months, 20@22c; do 6 to 8 @17c: Southern spring, 11@14c; California such stock as they may choose, under certain burry and defective, 10@11c; Australia regulations. The stock must be free from combing, 35@41c; do cross-bred, 36@40c; do clothing, 29@33c; Cape, 25@27c; English 1/4 to 1/4 blood, 331/4@37c.

CLAWSON WHEAT.

We ask the attention of our readers to the very interesting letter from "Old Genesee" in this week's issue. His experience with the Clawson wheat is not an isolated case, although many farmers are convinced that it has "run out," as it is termed. It is the history of all wheats in this, and we suppose in other States, that they "run out," year, and finally worthless. Clawson, in this respect, is only following a dozen other sorts within the memory of middle-aged farmers. We think "Old Genesee," like a few others, has discovered why these varietles have "run out," and applied the remedy. In every instance where a particular variety has been kept pure, the seed carefully selected, and the land properly prepared for its reception, it has been conclusively shown that the variety will not "run out." We may mention in this connection, the experiments with barley in England, where the grain was improved year by year in quality and productiveness by careful grains only for seed. We also have in mind the experience of Mr. D. P. Dewey, of Grand Blanc, with Clawson wheat. He believed grain could be improved by careful selection just as live stock has been, all broken and imperfect kernels eliminated. n doing this, for there were fewer shrunken and imperfect grains to be got rid of. Meanwhile it became more productive, and inter than ever. Now, the question is if Clawson, with "Old Ganesee" and Mr. Dewey, is doing better than ever, would not it have improved with others if they had from a general advance in the prices of adopted the same course? We think it metals. It may be several years before this would. Every breeder knows that to conduct his business in a haphazard way would soon cause his finest stock "to run out." He avoids this by breeding from his best. Grain growers must follow this line in selecting their seed, or it will most assuredly

THE POTATO CROP.

run out."

From notes in the July report of the U. S. Department of Agriculture, it is probable that the notate crop of 1888 will be the largest ever raised in the United States. Nearly every northern State reports an increase inthe acreage planted, and while some sections in particular States have suffered to some extent from drought, the general condition is excellent up to date. The only condition of potatoes falls below 90 are Ken- run a special train from Detroit on the tucky, Arizona, and Dakota, and in more | morning of August 1st, leaving Detroit at an two-thirds of the remainder it ranges from 96 to 99. New York, Indiana, Illinois, Iowa and Michigan have unusually promising prospects and a big increase in area planted.

It is very certain that the potato-growers of Great Britain and Germany will not ex- 884 since 1886. A large part of this inport much of their crop to this country the present year. They had a fine thing of it the wholesale annexation of outlying towns the past spring through the failure of the crop last year, but such things don't happen with any degree of frequency.

Notes from Kent County.

VERGENNES, Kent Co., Mich., July 21. To the Editor of the Michigan Farmer.

Our wheat crop is better than we anticipated. Last season I purchased Fultz (seed) wheat, which was adulterated with a white-chaff bearded red wheat. The adulteration has proven to be a good one; the Fultz wheat was destroyed by frost, etc., whereas the bearded wheat has given us a partial crop.

The Fultz wheat is a failure this year. The Clawson wheat is also a failure, yet it has excelled the Fultz.

Our next report will be a few points beter than our last one. However, wheat will not be more than half of an average crop in this township-Vergennes. Several fields sown to wheat have been

nowed, the wheat not being worth harvesting. Grass has made a good crop of hay, secured in fine condition. J. L. B. KERR.

Exports and Imports for 1887.

The chief of the bureau of statistics in his welfth monthly statement for the year ended June 30, 1888, of the imports and exports of the United States, reports that a comparison of the values of our foreign ommerce for the fiscal year just closed with those of the preceding year, shows an increase of \$11,336,716 in the total value of these imports and exports of merchandise. There was a decrease of \$20,208,592 in the value of exports, but an increase of \$81.545,378 in the value of the imports. The value of the imports exceeded that of our exports \$27,890,577, the former being \$723,865,146, and the latter \$695,974,619. A omparison of the demestic exports of the last year with those of the year 1886-7 shows that the decline was principally in the value of exports of wheat, corn, refined sugar and leaf tobacco, but there was an increase of the values of the exports of cotton, wheat, flour, beef products and animals. The imported articles which exhibit the largest increase in value during the last fiscal year are coffee, vegetables, tin in bars,

THE Mills bill passed the House last Saturday, as expected, by a vote of 162 to 149, two Republicans voting for it and tour Democrats against it. Mr. Randall being unable to be present was paired. He was

blocks and pigs, wool manufactures, hemp,

barley, silk, manufactures of wool and rail-

way bars of steel.

Illinois %-blood combing, 24@25c; do %- LIVE STOCK SALES AT STATE

A new feature of the State Fair this year medium, 15@16c; do heavy, 3@5c less; It is designed to give breeders of live stock Georgia, 24@25c; California northern spring an opportunity to offer at public sale, to the free, 18@21c; Middle Co. spring, 15 large number of farmers always present, unsoundness, and when once entered must be put on sale. Sales must be bona fide. The society provides the auctioneer, advertises the animals entered in this department, and collects five per cent to cover the necessary expenses. There is no reason why such sales should not become a most interesting feature of the State Fair, as there are many things to be said in their favor. The sales are to be held Thursday afternoon at o'clock and Friday morning 'at 10 o'clock. We know the first attempt will be in the nature of an experiment, and breeders will be inclined to hold back until that is, become less productive from year to it has been proved to be a success; but would it not be better for all to take a little interest in the matter and make it a success from the start? You will never have a better crowd to sell to, and buyers will be saved the evpense of a special journey to sales when they want stock. All classes of improved

stock are included. Entries close on the

first of August. Full particulars will be

found in the premium list. Give this your

attention at once.

A REPORT from Washington says that David T. Day, chief of the division of mining statistics, has submitted a summary of selection—using the best and most perfect | mineral products of the United States in 1887 in advance of the official report. The total value is \$538,056,345. It shows a wonderful gain over 1886, and is \$100,000,-000 greater than the output of 1885. The United States leads the world in the proand he began with Clawson wheat. His duction of minerals. The principal gains seed was carefully cleaned each year, and in 1887 were in the production of metallic ores and the fuels necessary for smelting He found that he had less trouble each year | them. The production of pig iron alone increased more than \$26,000,000. The high price of copper caused notable expansion in that industry. The product of coal is the creased in weight. Instead of the Clawson largest ever recorded. Taken as a whole 'running out" with him, it is doing bet- the report shows great prosperity for the mining industry. The grand total value of more than half a billion dollars, the report says, resulted not only from an increase in the quantity of minerals mined, but also total is exceeded, and the year 1888 will fall considerably below it. Among many reasons for the decrease this year is the decline in railroad building.

THE colored people of this State have selected the city of Fiint as the point a which to celebrate Emancipation Day, Au. gust 1st, and from present indications it will exceed in point of interest any of their former efforts in this direction. For orator of the day, ex-Senator B. K. Bruce, one of the most noted colored men, has promised his attendance.- Gov. Luce and Hon. Sumner Howard are also down on the programme for addresses. A large delegation from Canada, with a colored brass band, has arranged to participate in the exercises, and also several commandries of Knights Templar. To put the celepration within the States and Territories where the average reach of all, the D., G. H. & M. Ry., will The fare for the round trip will be \$1.95.

A SCHOOL census of the city of Chicago has just been completed, and shows a population of 802,651, an increase of 98,crease, however, can be accounted for in and villages. The increase, too, has been to a large extent, a most undesirable class of citizens, namely, foreign paupers and anarchists. A slower growth, confined to intelligent, law-abiding citizens, would be much more to her advantage in every way, and the recent disclosures of the police authorities have undoubtedly led residents to appreciate the fact. Chicago should follow the course of Detroit if she wishes to become noted for vigorous growth and prosperous, contented citizens.

THE Brotherhoods of Engineers and Firemen held a meeting at St. Joseph, Mo., on Wednesday last, and decided to continue the strike against the Chicago and Burlington Railroad. It looks as if they were determined to kill out that entire system as a warning to other companies who may feel inclined to question their authority over them. When they have succeeded, if they should, what have they accomplished? Simply left themselves the liberty to go and look for work elsewhere, which they now have, with the added competition of those who are now working for that company. Like Sampson, they propose to destroy their enemies and themselves together.

THE House Committee to which was intrusted the framing of a Pure Food Bill, announces that no bill will be reported at this session of Congress; instead, the committee recommend the passage of a resolution authorizing a sub-committee to further investigate the subject of compounded food articles during the recess, and to report a bill at the next session of Congress. So that the frauds have another year's grace in which to fleece the people, even if Congress should then have the moral courage to frame and pass a law for their suppression.

Mr. E. S. CUSHMAN, of Delhi Mills, Washtenaw Co., has secured a patent upon a wagon reach coupling of his own invention, a very simple and practical device. It does away with the bolt heretofore used, and substitutes a steel plate and set screw. Where the reach has to be altered frequently, it can be done in half the time and with much less trouble than with the bolt coupling, while it strengthens the reach rather than weakens it as the bolt does.

The Chicago river near the stockyards overed with grease and animal fats which have found their way to it from the slaughte houses. A boy threw a lighted match into it to see if it would burn," on the 16th, and quickly discovered he was smart enough to set a river on fire. The blaze covered several blocks and was not extinguished until about \$50,000 worth of dockage had been destroyed.

They have a "Fruit Union" in California instead of a "Fruit Trust." The fruit trusts can be found wherever anybody buys a package and sees only the top.

NEWS SUMMARY

Michigan.

The Flint Normal School started out with an

A Holly man has been selling early cabpages for the past two weeks

The Hudson bending works will remove to Howeli for a bonus of \$1,500.

One Kalamazoo dealer is already shipping three thousand bunches of celery per diem. New wheat is beginning to come into mar-

ket in the central and southern po The new crop of wheat is being put on the

market already in some sections, price g ally 80 cents, or a trifle above.

The 20th annual regatta of the Northwest. leed's Lake, near Grand Rapids, this week, The saw and planing mills in the Saginaw Valley are running on full time, and some of hem night and day to keep up with their

The Owosso canning works will be ready for business the first of the coming week. The actory has a capacity of four thousand en

Farmers about Ionia are astonished at the "business" done by the traction engine employed on Wm. Steele's prairie farm during The Kalamazoo velocipede factory will have \$30,000 worth of new machinery in its addi-tion, and employ over 100 men when the new

rrangements are completed An insane boy confined in the jail at Grand Rapids attempted to commit suicide by hang ing himself, and folled in that endeavored to ourn the building by setting fire to the straw

of his bed. It is not known who he Three counties, Allegan, Van Buren, and Berrien, produced two-thirds of the peaches, three-fifths of the grapes, and one ninth of apples grown in Michigan

A family at Pontiac soaked their hen-house boy of an experimental turn of mind applied a match, and is now done up in cotton wool, and harmless for the rest of the vacation.

The Milford Cultivator Company will reove to Marshall about September 1, a stock mpany with a capital of \$50,000 having een formed there. Thus Milford loses it

most important manufacturing enterprise A Ceresco firm has sold 1,000 pounds of ures out this is enough to poison 39,321,600,000 potato bugs, which shows conclusively how much is wasted by too lavish application Commencement week at the Agricultural

College begins August 12th, with the baccalau reate sermon by President Willets. The College is in a very prosperous condition. Fifty-one of its graduates are either presid-ents or professors in other colleges. August Dittmar, of East Saginaw, was fined \$75 and \$7 costs for whipping his young son

with a sewing machine belt, until his back

presented the appearance of raw beefsteak

There is a prevalent impression that the in-human father ought in addition to have been given a taste of the strap to see how good it would feel on his own back. George Chapman, farmer, living near La peer, matched his family nag against the Chicago express in a right-angled race for a crossing and lost the race. He also lost his horse, which was killed, and his wagon, which

was splintered to fragments. His sister, who

was in the wagon, received fatal injuries and has since died. The mystery attending the disappearance of John L. Bunting, of Tecumseh, who raised a great excitement by shooting at two of his neighbors, and burning the barn of anoth has been solved. His son, Fred, found remains in a piece of woodland. He h shot himself through the head, and still held

the revolver in his hand. Ben Penney, of Shiloh, a little hamlet ter miles north of Ionia, surrendered himself to the police of Ionia, stating that he and a man which Green assaulted him, clutteres which Green assaulted him, clutteres throat and forcing him to his back. Penney throat and forcing him to his back. Penney throat and forcing a wound which may a wound which may was in self-defense, is in iail.

The Portland Observer says: Mr. B. Proheads of Egyptian wheat which are immense The average length of the heads is six inches and on some heads the number of berries runs as high as 102. The perries are plump and solid. Mr. Probasco has a large field of this

A car containing the exhibits of the products of Utah was on exhibition in this city this week. The mineral exhibit is of course the principal feature, and some magnificent specimens of aliver ores, from mines assaying \$4,000 to the ton, sulphur, kaolin, asphal tum, rock saltpetre, and other peculiar and valuable products, line the handsome silver-mounted cases in the car. The object is to enlist capital in the development of these im-

Bondy & Johnston's store at Port Huron was entered by burglars one night this week.
They discarded their old clothes, and fitted
themselves out from top to toe with the best the establishment afforded, not forgetting collars, cuffs and jewelry. From the number of boxes raided, it is evident they were parti-cular about a fit. The store is one of the most centrally located in the city, and the enterprising thieves must have dressed almost under the eye of the police.

Strangers are flocking to Ishpeming, drawn there by the reports of the rich gold mines in the vicinity of the city. These are quartz mines, however, and expensive machinery is necessary to work them even if one is so for tunate as to strike " a ledge." There is no the rush there would be if there were place diggings and if pretty much all the land of which the rich ore is supposed to exist were not owned by capitalists or companies. A man must have capital to work a gold mine even after he has found gold.

A hailstorm visited St. Clair County on the 24th, which was the most violent ever known there. In Brockway Centre, a village of one thousand inhabitants, every north window, including even plate glass, was broken. Hallstones were from one to two inches in diameter, and the ground was covered three inches deep with them. Farmers suffered severely; nearly every orchard was stripped, and whole fields of grain rendered valueless. Young stock in the fields were killed. The damage is very areat, some farmers losing their entire crops. The path of the storm was about four miles wide.

General.

Yellow fever has appeared at Plant City. Seven hundred and fifty boats are stranded in the Erie canal because of low water.

Pittsburg mining experts say the natural gas is giving out, and will cease to flow within

Funeral of E. P. Roe, well-known and pop-ular author, took place at Cornwall-on-the-Hudson on the 23rd. Hon. Put Darden, Master of the National ed at his home in Jefferson County,

Coleman & Co., the San Francisco firm that recently failed for three million dollars, offer their creditors forty cents on the dollar.

The little mining town of Roslyn, W. T., was destroyed by fire this week. Every he vas burned, leaving 1,500 people homeless Upwards of four hundred millions of glass octiles are made annually in this country,

and yet more than twenty million are im-The collections of the internal revenue pureau for the fiscal year ending June 30, howed an increase of \$5,459,173 over the pre-

rious year. Charles Miranda, brakeman, killed near fremen, O., this week, is the seventh son of he family who has been killed in fatalities on

The discovery of rich silver diggings near Palouse, W. T., has set the Washingtonians crasy. Fully five thousand men are already

The late Hiram Sibley left an estate valued at \$10,000,000. His son, Hiram W. Sibley, inherits \$6,000,000, and Cornell University gets a legacy of \$30,000.

NAME OF SOCIETY.	HELD	AT	DATE.	SECRETARY.	Post-office		
Michigan State Agricultural Society tentral Mich Ag'l Society	Jackson Lansing Ypsilant	* ****	September 10 to 13 Sept. 24 to 28 Sept. 18 to 21	B B Baker	Monroe. Lansing. Ypsilanti.		
Northeastern Ag'l Society	Flint Gr'nd Ra Montgor	pids	Sept. 17 to 21 Sept. 17 to 21 Oct to	Geo F Lewis James Cox H C Davidson.	SaginawCity Gr'ndRapid Montgomer		
Georgia State Ag I Society Indiana State Society Illinois State Society	Olney Des Moli	polis.	Aug. 31 to Sept 7.	Alex Heron Chas F Mills John R Shaffer	Springfield.		
iansas State Society kentucky State Society yoniana Ag'l Society State Society	Topeka. Lexingte Helena. Lincoln	on	Sept. 17 to 22 Aug. 28 to Sept. 1. Aug. 20 to 25 Sept. 7 to 14	Francis Pope	Lexington Helena.		
New York State Society. Obio State Society. 2annaylyania State Society	Elmira. Columbi	ıs	Sept. 17 to 22 Sept. 14 to 19 Sept. to Nov.13 to 16	J S Woodward L N Bonham D W Seiler	Albany. Columbus.		
reginia State Society	Dallas Richmon Wheelin	nd	Oct. 11 to Nov. 31. Oct to Sept. 3 to 7	A R Venable, jr George Hook	Dallas. Richmond. Wheeling.		
Wisconsin State Society Ag'l and Arts Association Central Fair Association	Guelph, Kingston Waterloo	Ont. a, On	Sept. 17 to 20 Sept. 10 to 15 Sept. 24 to 28 Sept. 24 to 28	Henry Wade Jonath'n Davis W H Leas	Waterloo		
Northern Wisconsin Society	South Be Oshkosh St. Louis	end.	Sept. 10 to 14 Sept. to Oct. 1 to 6 Aug. 27 to 31	Chas G Towle A C Austin Arthur Uhl	M ishawaka Oshkosh. St. Louis.		
Toronto Industrial Exhibition	Toronto, Lawrenc	e,Ks	Sept. 10 to 22 Sept. 3 to 8	H J Hill J N VanHæsen Geo McBroom.	Toronto.		

STATE AND DISTRICT FAIRS.

MICHIGAN COUNTY FAIRS.

ırmada Ag'l Society	Armada	Oct to	I	Armada.
	Rochester	Oct. 2 to 5	Theo Dahlman	
	Bancreft	Oct to	THEO DANIELLE	Bancroft.
Station Morket Fair	Brighten	Oct. 2 to 5	G J Balteke	Brighton.
Central Fe ir Association	Hubbardston	Sept. 18 to 20	N M Campbell	
chelsea Fair Association	Chelses.	Sept to	M m Campben	Chelsea.
Downgiac Union Fair	Dowagiac	Oct. 2 to 5	Carl Gerding	Dowagiac.
Eaton Rapids Union Society		Oct. 2 to 4	H S Maynard.	Eat'n Rapids
Fearnaught Driving Park Ass'n	Romeo	Oct. 9 to 12	H & Evans	Romeo.
Penton Union Society	Fenton	Oct. 2 to 4	W Blackmore.	Fenton.
Esdley District Society	Hadley	Oct. 2 to 4	M L Parmerlee	
lonis District Fair Association	Ionia	Sept. 21 to 24	K R Smith	Ionia.
Wilford Union Society	Milford	Oct. 9 to 11	Lyman Cate	Milford.
Northern Mich. Society	Greenville	Oct. 2 to 5		Greenville.
Oakland & Wayne Society			C C Merrite	Farmington.
Plymouth Fair Association	Plymouth	Sept. 24 to 27	C B Crosby	Plymouth.
Fymouth Pair Association	Petersburg	Oct. 2 to 4	H Gramkie	Petersburg.
Retersburg Fair Association	Stockbridge.	Oct. 2 to 4		Stockbridge.
Mockbridge Union Pair Society	Litchfield	Oct. 9 to 12	L B Agard	Litchfield.
Union Ag'l Society		Sept to		Plainwell.
Union Ag'l Society	Allegan			
Allegan County				Allegan. Coldwater.
Branch County		Sept. 24 to 27	E P Ely	Niles.
Berrien County	Niles	Sept. 27 to 30	I D Commings	
Calhoun County	Marshall	Oct. 2 to 5	J R Cummings	Marshall.
Clinton County	St. Johns	Oct. 2 to 5	Merrett Frink Geo R Perry	
Eaton County	Charlotte			Charlotte.
Gratiot County	Ithaca	Sept. 25 to 28	OF Jackson	Ithaca.
Billsdale County	Hillsdale		F M Holloway.	Hillsdale.
Ingham County	Mason	Oct to		Mason.
Kalamazoo County	Kalamazoo	Oct to	TO T. MC111-	Kalamazoo.
Lenawee County		Sept. 25 to 28		Adrian.
Lapeer County	Lapeer		F G Bullock	Lapeer.
Midland County	Midland	Sept to	T. L. N. W	Midland.
Manistee County	Onekama		John N Brodie	
Macomb County	Mt. Clemens.		W A Rowley	Mt Clemens.
New Monroe County	Monroe	Sept to		Monroe.
Oakland County		Sept. 25 to 28		Pontiac.
Oceana County		Sept. 11 to 14		Hart.
Shiawassee County			*********	Owosso.
St. Joseph County		Sept to		Centerville.
Tuscola County			R S Weaver	Watrousvill.
Washtenaw County	Ann Arbor	Sept. 25 to 28	Geo H Pond	Ann Arbor.

Evictions in Ireland still continue. The

are resisted by the tenants to the best of their feeble ability, but the bailiffs have the strong

Mr. and Mrs. Gladstone celebrated their golden wedding on the 25th. They were overwhelmed with presents and congratula-

The German Emperor, returning from bi

NEW ADVERTISEMENTS.

ANN ARBOR, MICHIGAN.

TWENTY-EIGHT ACRES

-OF THE-

ELM FRUIT FARM

INCLUDING BUILDINGS.

IMPORTERS AND BREEDERS OF

HEREFORD CATTLE.

CHOICE STOCK FOR SALE.

BAY CITY, - MICH.

FOR SALE.

Highly bred Scotch Collie Shepherd Pupples Satisfaction guaranteed. Address

SIXTY-FIFTH QUARTERLY REPORT

- OF THE CONDITION OF -

LIABILITIES.

 Capital paid in
 \$ 150,000 (

 Due depositors
 4,169,525 (

 Undivided profits
 316,401 (

RESOURCES.

day of July, 1888. C. F. COLLINS, Notary Public.

with this institution.
All applications in person or by letter will

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ELIGIBLE TO REGISTER. Dropped Dec. 14, 1886, Nov. 22, 1887, and Jan. 21, 1889. All large, strong and vigorous. Solid co ors and from the best of butter stock on both sides. Guaranteed to suit and please. For particulars address

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E. A. ROGERS.

A box-car containing shelled corn was de- peror have been taking tea together in a very smothered to death.

At Redding, Col., James Mason, stage drigast upon a fifty-pound box of giant pow-and touched it off. It was a novel and effective way of committing suicide. The new steamer City of New York, belongo the Inman line, is called the "Flying bman" of the Atlantic. She can slip

rough the water at the rate of 23 miles per visit to the Czar, stopped at Stockholm on the return voyage, and was banqueted at the royal palace of King Oscar, of Sweden. to be appropriated for the establishment a government gun factory at West Troy, Y., where guns for coast defense are to be

In Minnesota, which has been afflicted with s of chinch bugs, which in some sections c destroyed every green thing, the ants attacked the bugs and prove very effi-

A cigar-shaped raft of 22,000 pieces of tim as launched at Two Rivers, N. S., last It is to make the voyage to New York, the counterpart of the one which went pieces last fall, on the ocean.

Mississippi furnishes a modern Borgia. The aughter of Dolph Mills poisoned her father nd three brothers, because of family disgreements. Two brothers are dead, and the and three brothers, because of family disgreements. Two brothers are dead, and the after and other brother cannot recover.

D. Engler, of Niagara Falls, drew \$1,780 to make to start his 18-year-old son in usiness. The lad seemed to think he was nite too young to settle down, so stole the poper and skipped for parts unknown. m the bank to start his 18-year-old son in siness. The lad seemed to think he was ite too young to settle down, so stole the oney and skipped for parts unknown.

Rippenderf, Dittman & Co.'s shoe factory at cinnati, one of the largest and best equip-in the country, having \$100,000 worth of and delicate machinery, was burned on th. The loss is \$310,000 and 550 persons

Rudolph Sevic, gunsmith of Chicago, was rested at that city, charged with furnishing mamite to the conspirators who had plan to assassinate the three law officers in the market prosecution. He confessed to aymarket prosecution. He co-egitimate dealings in dynamite.

A new ccean cable between New York and is Santiago de Cuba was opened the current reck. No particularly lengthy messages will be sent by any but millionaires, as the rate to dayt is 56 cents per word, and \$1.66 to San

The chief of the division of mining statistics s the total value of the mineral products United States in 1887 was \$538,056,345, nich is \$100,000,000 greater than the value in 85, and a large gain over the output of 1886. the United States lead the world in the profuction of minerals.

A New York enthusiast wants the United states to settle the Cuban question by the purchase of that fertile island, for which he ays Spain would take \$100,000,000. Cuba is og, and it is intimated Spain would not rry to get rid of her turbulent little isnd for a big bag of money.

Charles A. Dana, the veteran editor of the Y. Sun, in an address before the Wisconsin Editors' Association, said a newspaper should be afraid to report nothing which Providence a pleased to have occur. He thinks a college corrse in journalism would be of little value to a newspaper man, the best school being the

ewspaper office. Miners in the little town of Maynard, Ohio, ere paid off on the 25th, and many of them of drunk by way of celebrating the event. boarding-house for miners was filled with drunken men, and it is supposed some one opped a match somewhere which started a which destroyed the house. Three per-

ons were roasted to death in the flames. A deputy United States marshal stationed at Harian, Ky., has been compelled to fortify limes f and posse of 100 armed men in the urt-house, fearing an attack from those in-

erested in the whiskey business who vow reagence for the destruction of their proper-y. They are under the leadership of a des-perado who has already killed three men. Thirteen railroads, with an aggregate mileage of 2,428 miles and total apparent funded debt and capital stock of \$153,650,000 have ac-mowledged themselves insolvent since the ing of the year 1888. Reckless specula-

lve operations, excessive building, rate wars and the inter-State commerce law are the sauses to make up this unsatisfactory show-The force sent to quell the Indian uprising at Skeens Forks, B. C., consists of 125 men. The plan at starting was to leave Fort Essling-ton in canees down the Skeens River. If this is carried out it is believed not a man will carried out it is believed not a man will each the Forks alive, as the Indians, armed nchester rifles, are stationed along

the river and at several points could annihilate the entire force without exposing themselves in the least. It was supposed that the Sloux reservation

M 22,000,000 acres of land in Dakota was have immediate attention.

Opened to white settlers by the recent act of ply21 8t S. D. ELWOOD, Treasurer. Congress. But there is a clause in the act re-quiring the consent of three-fourths of the Indians, and they seem quite unanimous in their opposition to the proposed invasion of their ferritory. Nearly the entire 5,000 In-dians belonging to Standing Rock agency are encamped within two miles of Fort Yates. The commission amounted to treat with the The commission appointed to treat with the Indians has come on from Washirgton, but that will yold rascal Sitting Bull has been so-cretly influencing the minds of the Indians till there is but one chief who advises assent to the government; according to the government's proposition.

At the colleres at Pont y Pridd, Wales, 7,000 colliers are on strike for an increase of wages.

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Beautiful hidden name cards only 10 cents. Largest sample book in U. S. 200 styles. Agents wanted. Sample free. Co-preparity Emptyl. Co., 128 W. Madison St., Chicago. may12-6m

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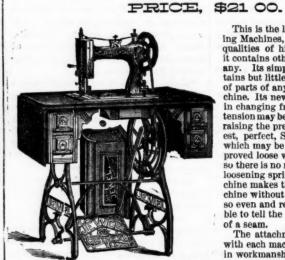
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ke season, and it is to accommodate these that I have this year made a reserve of Tweatr trallions, old enough for service, which will be placed on sale April 2d; it being my determin-tion to so control my importations that I can offer purchasers a first-class horse any day in the OR SALE All Animals Sold Guaranteed Breeders on trial satisfactory to purchase CARRIAGES AT ALL TRAINS. Address M. W. DUNHAM, Wayne, Du Page Co., Ill.

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Cider Press.
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Interest at the rate of 4 per cent, per annum will be allowed on all deposits Money to loan on satisfactory securities at curret rates of interest. Municipalities, ei her cities, counties, townships, school districts, contemplating issuing bonus, will find it to their interest to correspond with this institution. PURE SALT

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A . cattle, Shropshire sheen and Parameters a cattle, Shropshire sheep and Essex swine.

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J LEELAND, Rose Corners, Oakland Co, breeder of Shorthorn eattle. Stock of both sexes for sale. Coursepondence solicited. P. O. address Fenton, Genesee county. je6-ly A P. COOK, Brooklyn, Jackson Co., breeder A of Shorthorn Cattle. Good families represented. Bull Major Craggs at head of herd. Choice young bulls for sale.

A RTHUR ANDERSON, Monteith, Allegan 15 years, with Oxford Count 57286 by Imported Wild Eyes Connaught 34099 at head. Corres-produces calicited.

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F. MOORE, St. Clair, breeder of Shorthorn cattle. Families represented: Barrington Kirklevington, Victoria Duchess, Oxford Vanquish and Tea Rose. Bulls in the herd: Lord Rinklevington of Eric 44182, Grand Duke of Airdrie 62933 and Barrington 78886.

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CHARLES FISHBECK, Lakeside Stock Farm, Howell, Livingston Co. Breeder of Shorthorns. Herd headed by Bates bull Baronet, Belle Bates 47411, Belle Duchess, Cambria's Vic-toria, Stapleton Lass, Selinas and Bright Eyes families. Young stock for sale. June3-ly

G. S. ALLEN & SON, breeders of Fine Shorthorn Cattle; Lincoln Sheep, and Chester White Swine. P. O. address, Portland, Mich. jly21-6m R. BACKUS, Springdale Stock Farm, Will liamston, Ingham Co., breeder of thorough bred Shorthorns, Vermont and Michigan bred Merino Sheep and Percheron horses. Stock for sale. Cerrespondence solicited.

E S. BURNETT & SON, breeders of Short-four and a half miles east of Bancroft, Shia-wassec Co. Stock for sale.

R. BRADEN, Victoria Stock Farm, Bancroft Shiawassee Co., breeder of pure bred Short-horns of the Victoria and Stapleton Lass families with Lord Raspberry 2d 48633 at head of herd Stock for sale. GEORGE W. STUART, Grand Blanc, Gene-T see Co., breeder of thoroughbred Shorthor Cattle, Registered Merino Sheep, and Jersey Re Swine. Correspondence solicited. ja17-ly*

ENRY LESSITER, Oakdale Stock Farm, breeder of theroughbred Shorthorns. Stock or sale. Correspondence promptly answered. P. O. address, Grattan, Kent Co., Mich. jai5-ly

H. HINDS, Stanton, Montcalm Co., breed, er of Shorthern Cattle and American Mering Je27-1y* OHN C. SHARP, "Hillside Farm," Jackson.
Breeder of Shorthorn cattle and Poland China swine. Families: Perl Duchess, Rose of Sharon, Yeung Mary, Gwynne, Victorias, etc., with the straight Rose of Sharon bull, "Sharon Duke of Bath No. 64469" at head of herd. Young stock for sale. Correspondence solicited.

ing Machines, and combines all the best breeder of Shorthorn Cattle of leading tribes. herd headed by Gloster Wild Eyes 50239. Also Hambletonian and Percheron horses, Highland Scotch sheep and Jersey Red swine.

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THE COLLEGE FARM, Agricultural College, Mich. breeds Shorthorns of the following families: Victoria Duchess, Kirklevington, Van Metre and Flat Creek Young Mary, Princess, Rose of Sharon, and Harriet. Fennel Duke 2nd of Side View 69731 heads the herd. Also Poland-China swine and Southdown sheep. Good animals usually on sale. Address Sam'l Johnson, Sup't of the Farm.

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J. F. & E. W. ENGLISH, Saranac, Ionia Co., Mich., breeders of registered Red Polled Cattle. Bulls for sale. mr81:4m

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MITH BROS. Eagle, Meadow Brook herd of Jerseys. Stock of the highest quality and of the best strains. Houdan chickens. 830-1y W. J. G. DEAN, Hanover, high-class Jerseys Alexis strains. Pedro Star 11336, son of Pedro 5187, at the head of the herd. Registered Merino Sharn.

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Flint, Genesee Co., breeder of Hereford cattle (Lord Berwick 2d at head), Cotswold and
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S. WOOD, Saline, Washtenaw Co., breeder of Vermont and Michigan registered thorough ed Merino Sheep. Stock for sale.

W. MILLS, Maple Ave. Stock Farm, Saline, Washtenaw Co., breeder of Vormont registered thoroughbred sheep. Atwood ram Peerless at head of flock. Also breeder of Poland China swine. Correspondence solicited. Rathaway, Addison, Lenawee Co., Mics Register, registered in Vermont and Michigan Registers. Rams and Ewes for sale of my own breeding, together with selections from some of the best flocks in Vermont. Correspondence solicited.

O. LOMBARD, Addison, Lenawee Co., breed or of Vermont and Michigan registered thor-oughbred Merino sheep. Stock for sale. Cor-respondence invited.

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Buy where you can buy best. I have the oldest established flock of recorded Shropshire Sheep in Michigan. More flocks trace to this than any other. Success the test of merit than any other. Success the test of merit. Farm within five minutes walk of transfer station of G. R., L. & N. and T., A. A. & N. M. Railways. Call early and often.



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Don't buy a ram til you see Don't buy a ram till you see the Bingham flock. Regis tered and unregistered.

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AVIN LONGMUIR, Bannockburn Stock Farm, Pontiac, Mich., Importer and Breed-er of Registered Shropshire Sheep. Stock for sale. Write for particulars. f13-iy. GEO. H. GERMAN, Franklin, Oakland Co. importer, breeder and dealer in thorough-bred Shropshire sheep. Stock registered. I im-port my sheep direct from England. Correspond-ence promptly answered. 1630 6m

J. F. RUNDEL, Birmingham, Oakland Co. importer, breeder and dealer in thorough-bred Shropshire sheep. Stock registered. I im-port my sheep direct from England. Correspond-ence promptly answered.

J. LESSITER, Cole, Oakland Co., breeder of Shropshire Down Sheep, registered and un-registered; also Shorthorn Cattle. Stock for sale at reasonable prices and terms.

M ONTAGUE BROS., Chubbs Corners, importers, breeddrs and dealers in Shropshire sheep. Stock for sale at all times. Inspection of stock and correspondence solicited.

MUTTON FIRST and wool second practi-cally settles the tariff question. The oldest established flock of Shropshire sheep in Michi-gan and first on record. I import the best to be had. Stock always for sale at moderate rates, in mile east R. R. Junc. W. J. Garlock, Howell

OBERT R. SMITH, Howell, breeder of and dealer in registered Shropshire sheep took always for sale. Terms to suit customers A. BIXBY, Lake View Stock Farm, South Haven, breeder of Shropshire Sheep from imported stock. All registered. Largest flock in Western Michican. Inspection invited. au3-4m

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A. W. COOLEY, Coldwater, Branch Co., breeder of large English Berkshire swine of the largest size and very best strains. Pigs and young breeding stock for sale at reasonable prices. All of my breeders are recorded in the American Berkshire Record. Write for prices. ZERA BROWN, Englishville, Hent County, breeder of Berkshire swine of the best known scorded stock. Stock for sale.

Poland-Chinas.

6. BOWEN, Wixom, breeder of pure-bred poland-China swine. All breeders record-d in Ohio P. C. Record. Choice stock for sale.



G F. HARRINGTON, Paw Paw, breeder of pure-bred Poland-Chinas. All stock in Ohis P. C. Record. Breeding stock not akin for sale. Also breeding registered Merino sheep. Correspondence invited.

G. W. INMAN, Ypsilanti, Washtonaw Co., I, breeder of Poland-Chinas of the most popular strains. Some superior young pigs for sale. Also Merino sheep. All stock bred from reported animals. Correspondence solicited.

TRUE BROTHERS, Armada, Macomb Co., breeder of Poland-China swine. Breeding stock all of choice families. All stock recorded Write for prices. 225-1y

Chester-Whites.

C. A. SEARING, Lyons, Ionis Co., breeder and shipper of Chester White swine, Oxford Down sheep and Shorthorn cattle. All stock recorded. Correspondence solicited and personal inspection invited. Reduced rates by express W. TUBBS, Delhi Mills, Washtenaw Co., stock for sale. Correspondence promptly an-swered.

A & H. C. WRIGHT, Grand Blanc, breed-choice young breeding stock for sale at reason-able rates. Correspondence invited. stp-mri Jackson P. O., breeder of Essex swine and Plymouth Rock poultry.

Small Yorkshires. M. HILBERT, Bath, Clinton Co., Mich.,
breeder of Small Yorkshire pigs of best
known strains of blood. All breeding stock
recorded. Stock for sale.
my30-ly

C. ARMS, Portland, breeder of high-class
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Lights for sale; eggs from either variety in
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Poetry.

SECRETS.

Would you fathom the secret of Nature's art, The spell of her mystic measures; Would you learn of the hillside, heart to heart The soul of her inmost pleasures? Would you know why the wind-flower's ble

Or purple the violet's blossom? Then come to her haunts for your soul's relief And gather it home to your bosom!

Where the grass of the meadow is long and fre And tossed like a summer billow, Seek for some mossy stone and see How silken your dewy pillow, And list to the hum of the wandering guat, The shrill of the locust's singing. And tell me one-half of the sweet tones that Their song to your ear is bringing!

Where the lily is tall or the bending reed Sways low o'er the streamlet's sighing: Where the snap-dragon scatters its silken seed And the down of the thistle is flying; Where the wild bird roams at its own sweet will And the trout leaps high in the river; Come-tell me the secret of all and fill

The soul of my soul forever! For the wild bird knows and the seeds are ful Of a mystical lore and knowledge; And it needs no dullard that learns by rule The sweet old dreams of college To render the science that dwells in all The Children of Nature's breeding.

If you list to her soft, low, wooing call, To her mother tones give heeding! To her own she is fain and nothing loath To whisper the key-note in her, The miracle ever of daily growth

And the spell of the charm to win her:

The spell of the hills and the charm of With the day and the night dew gleaming; Oh! what a magical world is ours-How full of a sweet wild dreaming

WHAT LOVE IS.

Love is the centre and circumference, The cause and aim of all things; 'tis the key To joy and sorrow, and the recompense For all the ills that have been or may be

Love is as bitter as the dregs of sin, As sweet as clover-honey in its cell, Love is the password whereby souls get in To heaven-the gateway that leads sometime

Love is the crown that glorifies-the curse That brands and burdens-it is life and death It is the great law of the universe, a And nothing can exist without its breath

Love is the impulse which directs the world. And all things know it and obey its power. Man, in the maelstrom of his passions whirled The bee, that takes the pollen to the flower.

Miscellaneous.

OUTWITTED.

CHAPTER I.

A few years ago a small party was wandering about in the south of France. The chaperon of it was good-natured and indolent, and liked everyone to be happy their own way. Her husband was irritable and active, and fidgeted some of his young companions nearly out of their lives.

"You know, Elizabeth," he would fume. "you are responsible not only for these girls' health, but for their future prospects. What would Lady Daryls say if she knew you let young Blair take Ella to that popish

beth who was being upbraided, smiled and yawned, and showed a set of very even white teeth, and took up her fan and played with it, and only answered, "I wonder if Reynolds telegraphed to Perpignan for our

Poor Mr. Damer bounced out of the house, and crossed the courtyard, as he went down the dusty street, he thanked goodness Elizabeth never had a daughter, he wished with all his heart he had never been inveigled in this foolish trip, he could not imagine why-

"Why, Damer! In the name of all the world what brings you here?" Mr. Damer started as if he had been shot

He held up his hands; astonishment render "Why, Rennie!" he cried at last.

thought you were on the Rocky Mount-"So I was to have been, but fate decree

otherwise, you see; and I am only hanging about till shooting season begins."

And tall, brown-bearded Jack Rennie lit

his pipe, put his hands in his pockets and sauntered along by his friend's side, listening to a torrent of misery; of "how Elizabeth, in her usual fashion, you know, had arranged a party of silly young people who would go sight-seeing when they ought to be in bed, rowing on the lake when they ought to be on land, attending Romish churches when there are decent Protestant temples in the town, and above all, letting that scatter-brained Willie Blair dance about after Ella Daryls as if he were heir to a dukedom. It is infamous, simply infamous. Rennie. And here am I, treated like a lodger in my own house, my opinion not asked. It's beyond all bearing, upon my word it is!" fretted the poor old man.

"Never mind, old fellow, bear up!" an swered Jack Rennie, with a kindly twinkle in his gray eyes. He was used to Mr. Damer's confidences, and had more than once poured oil on the troubled waters of Damer Court. "I think I know something about the Daryls. Sir James is a friend of my uncle's down near Ranbury; he married a second time last year, didn't he? Is it his daughter who is so dangerous?"

"Oh, the Kingscotes, the other girls are no trouble. Good, excellent, plain people with no money. 'They join their cousins almost directly, and are going on into Spain. It does not matter whom they meet. But a prospect of £60,000 a year, old boy, is a handful to talk about, and Elizabeth is so me to take Ella just now, to keep her out of the way for a bit. We are expecting some news every day. If it's a girl, she will keep her fortune; if it's a boy, it's all up with her, and she is so extraordinary, I don't believe she'll care a pin about it. But with all my heart, I hope it will be a daugh-

So on they wandered, talking over the Daryls' affairs, till they reached the shore of

stillness hung over everything; for a few minutes Mr. Damer's tongue was even silenced. Then some clear English voices rang through the air, the splashing of oars came nearer, and a boat full of bright colors flashed over the water to the landing place hard by.

"There they are, there they are, told you so!" cried Mr. Damer, "and I had only gone up for half an hour to the Consul's. I had desired Elizabeth not let them go out; and when I came back they were off, the whole pack of them, and she had never troubled her head about them."

"But it is a lovely day for a row," began Jack, trying to extenuate the young people, and with his quick glance taking them all in. A young fair-haired fellow had jumped out. He was holding his hand to a girl in a white dress; she was standing up for a moment, tall, straight and doubtful. The step was a little distance off: the boat was

"There! That's Blair! I knew it Upon my word. Elizabeth ought to be ashamed of herself," Mr. Damer was cry-

"Bring the boat nearer!" another voice shrieked.

There was a slight lurch, the figure in white at the boat's head swaved. Blair's hand was outstretched, but he could not reach her, some of the party sitting safely in their seats screamed. A tall man rushed to the steps, a strong hand caught the girl's arm: "Never mind, you are quite safe," came in Jack Rennie's kind voice, as he bent across and held both hands to steady her. Then the boat was drawn nearer, and Ella Daryls, still holding Jack's hands stepped on the landing-place, and looking up with a pair of shy, sweet eyes, thanked

He raised his hat: "It was nothing," he said. But the gentle look in her eyes haunted him, and somehow as he went to bed that night, he wished that Sir James Darvis would either have a son, or else that the land containing his valuable coal mines would be rent asunder by an earthquake.

Quite early the next morning, Jack Rennie was roused from his slumbers by a sharp rapping at his door.

"An Englishman wished very particular ly to see him. It was a matter of great importance. He would wait in Monsieur's room till Monsieur was ready."

"Bother take the old fellow! It's Damer, of course. I wish I had never come near this hole," grumbled Jack. "Well, there is one thing, all his friends must be known by their beards; no one could ever shave. called up at any earthly hour."

And then, after to what Jack's mind eemed an incredibly short time, and to Mr. Damer's an insupportably long one, the dressing was accomplished, and he appeared in a comfortable loose brown suit of clothes-a happy contrast to the spick and span little man, whose emotions were so great he could scarcely wait for his friend's arrival to pour forth his grievances.

"What do you think has happened now?" he cried, holding Jack's shoulders. "What folly do you think she has committed this morning? " Got that kind of fat cure to marry then

off-hand?" proposed Jack, with a merry twinkle in his gray eyes. "It would save an immense lot of trouble, you know. No end of bother would be done away with.'

"Don't talk like an idict!" almost screamed Mr. Damer. "I shall have the Darvis down on me like-like the burning fluid of Vesuvius. Those Kingscote girls have left as. A telegram came last night from their they started at six this morning. Blair was station to see about their tickets, all the plans were upset. Elizabeth said that she she had asked Blair to stay over and go on to Perpignan. Of course, he jumped at it. I saw those Kingscotes smiling, and upon my word I felt completely at my wits'

Rennie gave a long whistle. "You know Damer." he said at last, "it's an awkward business to interfere with. I can't talk sentiment, I am not good at it; but if two people do love one another, outsiders have no right to meddle with them."

Mr. Damer started in astonishment. Wa Jack Rennie going over to the women's side? Was strong-minded, good-natured Jack going to preach the doctrine of apronstrings? What had come to the fellow? He watched him as if he were some curious new specimen just brought to the Zoological Gardens; but Jack, perfectly unabashed, lit his pipe and began again:

"She is an uncommonly nice-looking girl. She has such gentle eyes. It would be a

wicked shame to bring trouble on her." "Bring trouble upon her! Yes, that's it exactly. My very expression-my own words!" he got up from his chair and walked about the room. "The very thing I said to Elizabeth not an hour ago; but she was drinking her chocolate, and grumbling at the Kingscotes for leaving so early, that she would not listen to a word I said, You must come back. Jack, you always manage the ladies. Suppose you were to make a fifth, start with us to-morrow, and wait till Blair leaves. I will be grateful to you for the rest of my life."

"Oh, I don't know about that," said Juck, getting up and shaking the ashes out of his pipe, but a very happy little smile played on his lips and settled there. It was hidden safely away under his tawny mus tache, but it did not take its leave when Mr. Damer, clapping him on the shoulder, said:

"It is arranged, then, old boy. Elizabeth will be delighted to have her party increas ing again, and Ella Daryls has asked no end of questions about you since last night, when that idict nearly capsized her."

A few days latter a party were slowly strolling along the Pepiniere, at Perpignan. It was a dusty, dreary garden, where a few white-capped bonnes, sitting in groups, watched the children.

"If you call this worth coming abroad don't," said a thin gentleman in charge. Well, do you know, Damer," said Jack Rennie, "I like it. The quietness and the simplicity are very refreshing when you have been kicking about as I have."

Mrs. Elizabeth was holding a red paraso

than we can look at from this bench." "Shall we all stop? Are you tired?" asked pretty Ella Daryls, who was wearing a bunch of crimson roses in her white dress and in her white hat.

"No! no! as we are here we had better go green guide-book and putting on his glasses. "You are quite right, Damer," Jack an-

swered. "As we are here we will go on; but Mrs. Elizabeth is right, too, as she always is," he added deferentially, raising his hat to her. "And I don't believe there is anything more than she can see herself from this very bench.' A smile, and rather a meaning look pass

ed between the two. 'Go on, and tell if I am right," she said, nodding her head, and looking at Jack with her kind eyes.

Some people said that Elizabeth Dame had not the art of conversation; but she certainly excelled in the higher art-that of understanding and soothing her friends.

"What did Elizabeth say last night? You had a very long talk. Could you at all convince her of the inconceivable folly of her behavior?" began Mr. Damar, in such a manner that his two proteges had walked on ahead, and never noticed it.

"Yes, I had a talk with her," said Jack,

stroking his beard. "She is wonderfully kind, Mrs. Elizabeth. 1 really don't think, Damer, there is another friend like her.' 'Good heavens, Rennie! I am not talk ing of kindness: I am talking of her want of wisdom-of her utter incapacity of looking after other people's interests. Now, look at the way she has neglected Ella! Look at the way she has allowed Blair to dance attendance upon her!"

"What are you doing yourself at this present moment?" laughed Jack, whose gray eyes had been keeuly watching the two figures in front all the while.

Mr. Damer drew himself up. He could not stand being proved in the wrong; he was not going to be called over the coals by Jack Rennie.

That is because I thought I was entitled to a few minutes of sensible conversation and advice, Jack," he said, looking very dignified.

" And so you should, Damer," said the other, in his hearty way. "Only, don't you think an ounce of help is worth a pound of pith?"

And then the two, whose difference were never of very long duration, hurried on to overtake their companions.

Willie Blair's gay voice was rattiing lightly on. He was so artless and fresh that no wonder he became a favorite wherever he went. And yet this afternoon he did not seem quite in his old favor. Klla Daryls' step became slower and slower.

"Why did not the others join them?" she asked herself, fretfully. How could she force herself to take an interest in the nucle she had never heard of before? Ah! there were their voices! Jack Ren-

nie's ringing tones came distinctly through the silent air, and it seemed somehow as if what he was saying just reached her, and stayed with her; as if his voice would go no further. The color in her cheeks mounted brightly, a glad light shone in her

"Died-did he, you said?" she said turning to Willie Blair, catching his last words, and trying to keep up a show of in-

him the Nabob, you know, because, you see, he sprung a mine on that land he bought in South America, and it brought him in thousands a year. Well, the poor old Nabob went out to look at some horses in the park to have gone too, but when I sent to the last year, took cold, and in twelve hours he was annifed out. Literally only took twelve hours to snuff him out. He was an awfully thought Ella would be dull with only us, so good old fellow; used to tip me so well whenever I went up from Eton to se him. My governor felt it tremendously: and then there was another odd thing, you know."

> But the odd thing was not brought to light, for Mr. Damer coming up at the same instant and pulling out his watch, proclaimed it time to turn.

Ella Daryls' bright look was neither los apon him or upon Rennie.

"lam sorry we disturbed you," said Jack, rather shortly, as he walked by her side homewards.

"You did not disturb us," said poor Ella, faltering and blushing. "But why do things always come to an end when they just begin to be nice, and why do people almost always appear to be what they are

"I don't know," repeated Jack again, in bis stiff manner. "I am sorry we brought ty? your nice walk to an end, Miss Daryls."

"But," cried Ellla, looking up startled and truthful, "you did not. You know it was just because you-because you-" and then she stopped short.

What was she saying-what was she confessing? This grave Mr. Rennie, who looked solemn and hurt, was very different from the kind "Jack," Mrs. Elizabeth had talked so much about. He was quite another person from the friend of the last few days the friend whom somehow she had looked upon as a sort of protector from that day when they had first met, and he had held out his hand to steady her in the boat; the friend who was so different from everybody else she knew. What did it, mean -what had happened. Her blue eyes looked sadly down the long avenue of plane "I don't quite know that I said what I meant, Mr. Rennie," she began,

Jack leant down, he saw the sweet upturned face looking out into the distance; quite unawares he gave a sigh, and then Ella's blue eyes, as if they were obeying some will stronger than their owner's, glanced for a moment right into the gray eyes near them; and Jack, bending his head very reverently, read there a vision of joy he felt himself unworthy to possess, a promise of something which had hitherto been

very softly.

but a dream in his roving life. "Four minutes to three," cried Mr. Damer suddenly, taking out his watch, and then coming to a dead stop. "Why, where is Elizabeth? We left her on this bench; on this very bench." he said, rapping the

ground with his stick. "So we did," said Willie Blair; "I re ember it perfectly. That bough," gently ouching a bunch of leaves with his cane " just hung over Miss Daryls' hat, and I was

don't believe there is anything more to see | didn't though; they exactly gave them a setting. It was the very thing, you know, to finish them off."

Mr. Damer glared at the poor boy; if he could have invented anything severe enough Willie should have had his lecture on the spot. But Ella was drawing nearer, and on," said Mr. Damer, opening his little the caution Jack Rennie had impressed upon him, was the most important step to be considered.

"What are you waiting for?" cried Jack, who was not inwardly blessing this sudden halt.

"Why, for Elizabeth!" shouted her husband; "she never comes when she is wanted, and now that she was expected to keep quiet she has gone!" "She is over there," said Ella, in her

gentle voice, pointing to a group of trees a little farther on, where a band was playing, and some half-dozen were sitting on the benches round listening. The familiar red parasol was a friendly landmark. Elizabeth looked up as they came to her seat and nodded her head.

"Do you know," she said, they have actually played some English airs; and one was, 'Willie, we have missed you!" I wish you could have heard it." "I wish we could feel it," grumbled Mr.

Damer under his breath, and then he sat

down by Mrs. Elizabeth's side, while Ella went up to the conductor, and in her pretty, shy way, asked him if he would have the goodness to play the English air again. The conductor with many gesticulations and bows, felt himself honored that his band should acquit themselves to the pleas-

ure of Mademoiselle in their rendering of the beautiful air of Mademoiselle's charming country; and so, 'Willie, we have missed you," was struck up again. Jack's deep voice sang an accompani ment, Mrs. Elizabeth beat the time quite

animatedly with her parasol; Ella, blushing, put in a few high clear notes, while Willie, the unmissable, had it all with an unmistakable John Bull whistle. " Capital! capital! Never heard any

thing so good abroad before," Mr. Damer kept on saying. When it was ended Jack sauntered up to the conductor and placed something shining in his hand.

"Ah! gue les Anglais sont droles!" said the man with a shrug, as he eyed some thing golden and round in his hand. "And all for a pitiful English discord! Bah!"

But the pitifu I Erglish discord was the beginning of a wonderful harmony, a harmony which comes to some of us sometimes here; a unison of love, thought and feeling, which no false chord could ever touch, no harsh note can ever jar.

Did Ella know it as she sat there very still by Mrs. Elizabeth's side? Her hands were tightly clasped, she felt somehow as it something very mysterious, very powerfulwere coming to her, and as if she were already somebody else, watching that little party round which Mistress Fate was spinning some of her wonderful threads.

They all five sat on in a tranquil silence till the shadows began to fall, the clock from the Cathedral chimed its balf-past five. the band had disappeared, the children and nurses were all gone.

"And we must go, too," said Mrs. Eliza beth, yawning; "this climate makes me so

"Pardon, Monsieur," cried a voice, and the obliging landlord of the botel came hurrying up. "Behold! These came half an hour anxious about a telegram.'

He handed one envelope to Ella, anothe to Willie Blair. "Open! Open quick!" gasped Mr. Da

"What an awful nuisance!" cried poo Willie, not at all understanding that Mr. Damer's command was not meant for him The governor's yacht is at Marseilles, an must join him tomorrow. What a beastly shame to hunt a chap in this manner. think I'll strike-wire I won't. What do

you think, Mrs. Damer?" But no one was listening to him, no one heeded his cruel message, for Ella, looking

up with a glad face, cried: "There is a little boy just arrived at ho and he is very strong and flourishing." "The-there is!" said Mr. Dame

playing a very displeased tattoo with his stick on the gravel.

"Oh, my dear, I am so sorry," sympa thized Mrs. Elizabeth. "Why?" cried Ella. Would she be

state prisoner any longer? Would not the chain of those £60,000 a year fall from her, giving a happy freedom? Had not this baby opened the golden barred door? Who should give her now in its stead love, liber-She looked up, and sgain her eyes me

Jack's kind ones; they were watching her with a curious, glad expression, an expression which made her linger on her way back to the hotel and sav: "Oh, Mr. Rennie, you understand with-

out my talking. You know all without my saying a word. Ah! I am so thankful I am no more rich!"

And this dethroned princess smiled a glad little smile at the thought of her departed wealth.

"Wait," said Jack Rennie, and his voic had a strange ring in it; " wait," and he laid his hand on her shoulder. too, am more thankful than I can say; for if you had been the very great heiress f never could have said what I must say." Then he paused, for he could not speak:

but Ella, with a sudden revelation, knew what the silence meant, and, stealing her hand into his, they both bent their heads and thanked God with two very grateful

"Nobody should be out after sunset in these beastly foreign places," cried Mr. Damer that evening. "What in the world has come to Rennie? Has he heard of any undesired arrival depriving him of his property? He has been talking to Ella on the alcony for an hour or more."

"So I have, old fellow," answered Jack, coming into the room with a radiant face. "But, to tell you the truth, I have been persuading your defrauded heiress that two people can live happier on five thousand a year than on can on sixty thousand. What do you say to that? It is a problem she and I intend to solve."

"Good gracious!" cried Mr. Damer, for another time in his life perfectly outwitted.

delicious soft ripple at their feet, a quiet here," she said, "till you come back. I afraid it would have spoilt her roses. They getting up from the sofa and helding Jack's "You did!" roared her husband, more

and more bewildered. "But you did not, and I did not," said Ella Daryls, stepping in from the balcony, blushing and smiling. "It was only this morning that I knew it myself."

The moon stole in through the window and sent a faint flickering light over the girl's pretty graceful head.

Mr. Damer was still too bewildered to say word; he turned angrily around towards his wife, and then Ella, growing bolder in her anxiety to shield her friend, laid her little hand on his arm and said:

"You know Mr. Damer, I have to thank you and the baby for it all. Without the baby I could not have lost my fortune, and without you I could never have known-Jack."

At this moment a band struck up. Did it expect another golden recognition? "Willie, we have missed you!" came from

ome shrill brass instruments. " Poor Blair!" said Mrs. Elizabeth softly.

"Poor Blair!" cried her husband, very indignantly. "He was about the best and most inoffensive young fellow I have ever net. And, at all events, one knew what he was after!"-From the London Belgravia.

Putting up the Shades.

It was all on account of a shade, an ordinary low-priced shade, with a spring roller and an inoffensive air that concealed its real depravity, as the blazoned exterior of a circus side-show belies the actual condition of affairs within. The shade was green in color, not the old-time brilliant grass hue that took its tint direct from the best patch in the pasture meadow, but fashionably green, olive, verdigris, sage, or some of that lot. Nowadays, when a good onest color has as many variations as 'The Maiden's Prayer," a commonplace nan who deals in coil rope and link chain can't be expected to work the combination right the first time. If I were to describe the exact hue of this particular, sickly green, deceptive and diabolical shade, I should say it resembled nothing so much as the bilge water around a North River ferry

lock at low tide. You see, we moved the first of May into a nouse that is rather larger than any we have ever had before, and we rattled around a ittle on the upper floors, though the parors were fine enough and the front door mat was solid and substantial enough for the vestibule of a Vanderbilt mansion. Of course, not a single shade that had interposed a necessary screen in the other house between the madding crowd and our domestic affairs would fit by inches any window in our new home, and along with a good many I thought. I had take off the small castother expenses incurred in the effort to live up to hard-wood floors and tiled mantles, re encountered that of new shades.

My wife is a clever woman, though, and on this afternoon, when I left the contemplation of coil rope and link chain at an early hour, lured by the memory of the door mat and parlor furniture, she met me with a smile of satisfaction that was enhanced by the glow of the rose-colored sash curtain in the vestibule door, and was beautifully reflected in the burnished brass of the lantern lamp with variegated cat's eyes which was suspended from the hall celling. I merely throw in this bit of description to delicately indicate the sort of style we live in, and to there was a marked discrepancy between the up."

"Of course. But it was really good. accentuate the distance, the chasm, so to two. -an hour ago, and I have been searching speak, between it all and the bilge-water smiles and tea gown, and said in her newlyacquired Early English way:

"John (it's too bad my name is John.) I

think the shade problem is solved." "How's that?" I asked, striving to soften my link-chain brusqueness by throwing my overcoat gracefully over the antique oak hall settee, and hanging my hat with an easy air upon one of the brass jabbers which occupied upper lofts in the same structure.

My wife did not reply. She was standing motionless, her lips apart and her breast

heaving with some deep emotion. "Stand right where you are, John," she whispered, "and look through into the further parlor (we don't like to say back). Do you catch the bloom on that Daghestan rug? Is it not beautiful in the soft light of that oriel window? A lovely intermingling of color, like the blending of many prayers as

they rise to heaven!" Her voice sank away and her hands clasped in ecstasy. I shuddered in unison and bent over my little daughter, concealing my gathering tears in the short waist of her Kate Greenaway gown. After a few minutes of silence my wife went on as if nothing had happened, as, indeed, nothing

"But about the shades, John," and she led the way out of the square fireplaced hall up two flights of stairs into the third floor

"In shopping today I ran across a special sale' of shades, and got these two as an experiment. If they shed the proper light we'll order enough for the whole house, back and front, for they are really a wonderful bargain, and the color, I think, is just the faint, soft tint we want," and she unrolled one and held it up against the pane, watching critically, with head on one side, the light as it filtered through and fell with a kind of dizzy, sea-sickening effect upon the pine floor and yellow step-ladder that at the moment were the only furnishings of the place. I forget to state that our house is modernized only two flights up.

very coloring I have dreamed of," and I, being of a sympathetic nature, genially shared her enthusiasm, and buried all bilgewater tendencies deep in my own breast. "I've got the fixtures and all complete," went on my wife, when we had worked off some of our rapture, "and I had the ladder brought up, thinking you would put them up so I could see how they look from the ontside."

It occurred to me at the time that my wife would have to let herself down from the roof for that purpose, as the few square only produces an area to comfortably swing a cat in, and a position at its extreme limit the second floor. However, I did not say cherished schemes of his better half. I prefer in this case to go out in the back yard, get the effect there was a sort of Hogaria press her Pysche knot against the boundary line of beauty to it that wasn't pretty, fence, crane her neck, roll her eyes back dont suppose then it would have occurred to under her bangs, and stare at the brick wall in a very knowing and unbecoming way.

It was decided I should put the shades up at once, and I accordingly placed the ladder in position and climbed up to adjust the fixtures. It was a lovely day in early summer, and the pungent smell of a solitary ailanthus tree in blossom half-way down the court came to me, mingled with the heavy incense of frying meat in somebody's nearby kitchen. A pretty girl was sewing at a window opposite, and I remember I stifled a desire to take off my coat in deference to the presence of unknown female beauty, and also that I wished in an idle, desultory sort of way, while I reposed at length upon the stepladder, that my wife would be called downstairs.

This digression is in strict accordance with the best authority in novels. It is considered effective to pause as the climax ap proaches, and descant in detail upon all uninteresting and irrelevant surroundings. It is also quite comme il faut among us writers to finish such digressions with some sentence like, "and to this day the perfume of a cardamon seed or the shrill jargon of an elevated railroad brakeman quickens my pulses and sends the hot blood leaning through my veins." Likewise, to me, now and forever, as the red rag is to the quicktempered male bovine, so is the vellow paint of a stepladder. Oh, for a thousand horns to gore it to a bloody death!

The first shade went up with the ease and celerity of bulled stock, and I stood on the floor within two minutes, trying the spring and discoursing in a light, airy manner to my wife:

"These shades are all right, Annie. Her name is Mary Ann. but she likes me to drop the Mary and spell it with an "e." "I wish you had sent home the rest. I have just about time before dinner to do the whole business. The last tenant (I was pounding n a fixture of the second one now) obligingly left the trace of his work, so the measurements are all right. I don't always feel like tinkering about the house, but I'm in the mood to-day-hand me the other shade, Nan-and if I had them all we could go to bed to-night feeling that another big step towards settling-hello! here, this shade's too long!"

"Oh, I presume so," said my wife, cheerfully. "I fancy they are not uniform; that is the reason, doubtless, they are sold so cheap.'

I got down and found the roller would

have to be cut shorter. We had no saw, of course, but the big blade of my knife and the tack hammer would work all right iron arrangement of one end of the roller before I cut it, and when I had replaced it after the operation, I found the shade itself was a little too wide for the roller. But I obviated this by laying, unobserved by my wife, a small fold in the linen, which I dented down well with my thumb and finger. Then I ran up the stepladder and proceeded to hang the shade. The former tenant, who had so kindly left the relics of his work, had used outside fixtures, into whose places I had confidingly tacked inside ones! In measuring the shade at the window, however, I had consistently borne in mind that my fixtures were inside ones, consequently

I didn't run down the stepladder that ously. My wife asked me with a smile what was the matter. "Oh, the thing's too long yet," I said.

"You must be careful not to cut it too short," she suggested, and I think I lang hed a little as I asked her facetiously who was doing the job, she or I. I don't know positively that I laughed. If I did, it was the last laugh in the afternoon. Meanwhile the pretty girl opposite had put down her sewing and was evidently interested in the shade proceedings. I did not like the smiling expression of her face. The smile was too broad to be becoming. About this

time I took off my coat. I had to take the shade quite off the roller for the second cutting, as I discovered it had already got creased and soiled from my previous manipulations. It was fancy work pulling out and carefully saving every one of those precious half-inch tacks which the printed notice warned me were the only ones to be used. But I did it, and took off the casting and carefully measured the roljer at the window again, and hacked and hewed away with my knife and hammer and replaced the casting, then counted out my eleven little tacks, and, kneeling on the floor, tacked the shade once more to the roller. Then I held it up to the window, only to discover that I had nailed it wrong side out, which made it turn the wrong

"Blank the thing!" I said, and my wife uttered a reproving "Oh, John!"

Well, I pulled those eleven tacks out, and then solemnly seating myself on the stepladder, I swung the roller around, reversed the shade, and painfully tacked them in again. Naturally, the result was precisely the same as before. When this fact became patent to my masculine, but for the moment dulled intellect, I fired a volley of profanity which contained a "blank" for each tack-My wife must have left at about the fifth. when I had concluded she and the baby had gone quite out of hearing. I felt that it was better so. To a man who

sight of an innocent baby face and a pair of clear baby eyes raised to his own. You feel somehow that there isn't impression enough being made to afford a satisfactory relief. I tackled that shade again, gnaw ing my moustaches, as the women novelists say. That was, in fact, a mild way to put it. I yanked the linen off, tearing it, of course, and lost two of the eleven tacks before I got across. Then I had a happy thought I would just try that roller alone before I replaced the shade. I did so. It was still a trifle too long! I was so pleased that I had not been fool enough to wait till I had once more tacked on the shade that I really did not mind removing the easting for the third time and hacking again through the oller. Then I sat down to restore the It looked now too broad for the oller. Was it? Yes, it was. It must be cut. Rather a trying job, too, for s novice to do evenly, and I had no rule.

to me to use as a rule the straight stick which weights the hem at the bottom of the shade if it hadn't stuck out about an inthrough the shortened width. I took it one

straightened the wavy side by it, jabbed of the stick to fit, replaced it, and then went for those tacks again. There were only nine left, but if each had been a separate and distinct imp of Satan, they could not have behaved in a more diabolical manner. My thumbs by this time had become very warm and thumby, and those infinitesimal tacks played tag and seek in and about my moist and trembling digits. I would bear down upon one like an ocean steamer after a rowboat, and come up with the infernal thing sticking poi

It took about six attempts to get and when I had got it I only with the hammer once out of ten times. T other nine blows were directed elsewhen Meanwhile the lovely day in early was getting hot; I was not simply person ing at every pore, I was pouring out at ever perspire, and that girl across the way had been joined by a female companion, with whom she was interchanging a laughin conversation and free looks in my d took off my yest. the ninth tack was say

punched in, and with my neck aching, knees trembling and my hands cramping I once more crawled up that chrome-yelle adder, and hopefully, trustfully, but with suppressed volcano-like about the mouth, endeavored to hang that

The roller was now the eighth of an ine too short.

"John," said my wife timidly, at break fast the next morning, "you won't forget to send the glazier to-day, and, by the way," he went on more brightly, "you needn order kindling-wood this morning; Bridget ays the sash frames and stepladder will last everal days.'

THE ARTICLE WAS GOOD. But Somehow or Other It Didn't Pleas

Robert J. Burdette, whom every mows, whether they ever saw him used to run a little daily paper Ill., writes F. H. Carruth in the New Tribune. I believe it was Peoria-any it was the paper he enjoyed runni much, because there was never any tainty about it. He knew positively ever Monday morning that there would enough money to pay the compositors

urday night. He hadn't written so much good hur then as he has since, but it used to crop of once in a while-he couldn't help it. On day a prominent citizen of Peoria gotint trouble with a hackman about the amount his charge or something, and took of his coat and fought him all around the He made it a red day for hackmen, too. The next morning Burdette had nearly There had been so m space to fill and he turned his fancy loose an filled it. He had laughed about it quietly himself all the way home that night after he wrote it, and in the morning read it over to see if the boys had got it set up all right and smiled sort of inwardly to himself again.

About the middle of the afternoon the

man who had the trouble came in. Burd trembled a little at first, because he didn's know how he might have taken it, but the man wore a broad grin on his face and seemed to be very much tickled over i "That was a good one on me in the Howler this morning," said the man. "Er-yes-do you think so?" said Bur-

"Oh, capital-took it off first-class. Did you write it? "Oh, yes, I scratched it off in a hurry last light. We have to have something to fill night.

didn't know you could do as well as that," went on the man enthusiastically Oh. I didn't think much of it " returned Burdette, modestly. "If I had only a little more time perhaps I might have made

mething out of it." "Oh, you had time enough-plenty time, I assure you. It was fine. I didn't really do all you said I did."
"Oh, of course not. Certainly not. Go to have something lively in a newspaper,

'I see-especially in a live local paper. "You understand it." 'I think so. Of course I didn't vell lik a man with his foot in a lawn-mower all the time I was having the controversy.' "I see. And then I didn't raise the hach

man up and pound the face of the earth with him till the police stopped me for wearing out the paving. "No, not at all-had to make it lively, yo Of course, Then I didn't chase himinta the country half a mile, did I now?"
"I never heard that you did. I just

althred that in Von know a local par

I understand. Then of course I didn't roar so coming back that people thought there was a hail-storm coming "Oh, you didn't roar at all. I made that part up to make it lively."
"I thought so. Then I didn't stand of the corner and howl till I was tired and say I could lick any hackman who ever looked through a collar, and go around the streets cracking my heels together and saying I

than a foot wide." "Of course not-nothing of the kind at all. I just put that in-got to in a small town with a daily paper, you see."
"I notice you have to. It was a funny piece, take it altogether." "Y-e-s, I thought perhaps it was a little

was from Bitter creek where it wasn't more

funny," admitted Burdette, a little uneasily.
"You say in it the hackman was a small Why, yes, rather small, lunderstood." "Probably not as small as you are?"
"Oh, n-no, I presume not. I'm not ver big, you see. Pleasant weather we're have ing, Major." "Y-a-e-s, very pleasant-a little cold for

hackmen and some editors I know of.
Probably, then, if I licked the hackman

there wouldn't be any doubt but that I could

Going to the caucus to-night, Colonel!" "I expect to be there, but you won't you'll be in the hospital-you little, insigyou'll be in the hospital—you little, insignificant, one-horse country editor," and he reached out and got Burdette by the colar. "Chased the man out beyond the fair grounds, did I? Roared like the eight thirty express coming back, did I?" and he began jabbing Burdette up and down like the dasher of an old-fashioned churn. "My actions would have made a fish laugh, the Howled around till I made the world's back suche did I!" and all the time he was danced. is endeavoring to swear off a little surplus activity, there is nothing invigorating in the ache, did I?" and all the time he was danoing around the office with Burdette at arms length. "Oh, you're going to be the great American humories! No arche of it at all American humorist! No doubt of it at all You'll make the universe double up and roll on the grass some day! You're funny, oh, so very funny! Just give you a little more practice on me and you can start out lectur ing!" and it's hard to tell what would have become of poor Burdette if a big pressman hadn't come in just then, with his sleeves rolled up and ink on the side of his note, fought and relieved him. The pressman foug the man ten minutes before he managed

ear his coat off and shut up both his eyes and fire him down the stairs and half was across the sidewalk. He accomplished last, however, and went back to work Burdette gathered himself together solemn account of the death of the oldest Free Mason, who had just pass

quarter of a deer he had killed that morn-

ing. When the trap was ready no animal could get at the bait without putting its head in the noose. I went to sleep that

night counting on the scalp of a wolf, and

next morning I was off as soon as I could see my way through the forest. It was well that I was not ten minutes earlier. I was within ten rods of the trap when I was

stopped dead still by the screams of a pan-ther. I knew the beast as soon as he yelled,

and it was easy to conclude that he was i

trouble. I crept forward very carefully, hearing a great thrashing about with the

him about the loins, so far back that he

could not get at the rope to bite it, and the

spring of the tree barely permitted him to touch the earth with his paws new and then.

job, was furious. All the rage in his nature

that his end was near. He was at a great

disadvantage, of course, but his struggles were so violent that I became alarmed and

ran away, knowing that, if he got loose, he would tear me to pieces. He was still fast

when I returned with Gordon, and a bullet quickly put an end to his career. He was

an old and a dangerous beast. When we

came to skin him we found the point of a

knife in his shoulder, and he had several

scars made by the weapons of the Indians.
We did not catch sight of a panther for

several weeks after this adventure, al-

though never a night passed that we did

not hear their screams. The weather had now come on warm, and we could do no

more at trapping. Father fell very sick, and, one day about the middle of Jnne, it

became plain that he must have medical

assistance at once. Gordon mounted one

of the horses for a ride to the doctor's,

distance of twelve miles, and when night

came he had not returned. It had scarcely

grown dark when the wild beasts about us

began to howl and roar and skulk about the

house, and, after catching sight of several

wolves, I went in and barred the door

There was only one opening for a window,

and over this was nailed a blanket. It was

high up from the ground, and only about

two feet square. The horse was in a stout

pen, and there was no fear that he could be

got at. When night had fully settled down

we were in a state of siege. Wolves to the number of forty or fifty surrounded the

house, and, growing bolder as time passed

and their number increased, they made

trance. Gordon had taken the gun with

Mother stood at the door with one, and I de-

fended the window with the other. The wolves gnawed a hole in the door, through

which one could have passed but for her

presence and the sharp-edged weapon she

wielded. Every head stuck into the open-

ing received a blow, and the baffled animals

finally ceased their efforts at that point.

hour, without, however, having made much

to a more dangerous enemy. There was a

sudden pounce on the roof over our heads,

for us that the builders of the hut were

either lazy or in a hurry, and had built only

a small fire-place and a small chimney

There was no fire on the hearth, and had

the chimney been the ordinary mammoth

affair of the backwoods we should have had

was soon joined by a second and third, and

then two or three others were heard on the

ground. They may have scented the dead,

to get in we were soon led to understand. I made a smudge on the hearth to keep

protected the door. We were hardly at

our posts when a panther sprang up and

tore the blanket down. Our light consist-

ed of a piece of cotton lying in a dish of coon's fat, and at times the flame was al-

A couple of minutes after the blanket

was torn away a panther sprang into the opening. Had he been left undisturbed he

could have squeezed through, but the in-

stant his head appeared we both struck at

him. His right fore paw hung over the

edge of the opening, and my blow cut it

clean off and dropped it on the floor. That settled one of the visitors, although the

settled one of the visitors, although the row he made over the loss of his paw al-

most unerved us. At that moment there

seemed to be five or six of the beasts about,

and it was only a short time before another

sprang into the opening. Mother struck

him square in the face, and five minutes later I severely wounded a third. That

seemed to dampen the ardor of all, for they

soon withdrew, and the wolves returned

It must have been that these creatures

cented the dead. It was the first time they

had appeared in such numbers and so

boldly, and hunger could not have been the

cause of it. They made little or no effort to

get at the horse, but for an hour after their

return they made desperate and determined

forts to break their way into the cabin.

They came against the door, six or eight of

them at once-with such force as to shake

unkin clay ground, they would have dug

It was midnight before we had a let-up,

and the last wolf did not leave before two

o'clock. Up to this time mother had not given way to her grief. When danger

passed away she broke down, and from then

to daylight I sat alone by the door with ax

in hand. I looked for Gordon at an early

hour, but he did not appear. About te

o'clock the horse came home, bitten in a ter

rible manner, and so serious were his in

luries that he died before night. We knew

he had been pursued by wolves, and there

was little doubt about the fate of his rider

We dared not start out in search of help, as

we knew not which way to go, and we dared

not leave the body of the dead in the house

nother night for fear of the wolves. We

waited until three o'clock, and then, hearing

nothing from Gordon, we dug a grave, wrapping poor father's remains in a sheet, and buried them as best we could. Next

day some hunters called, and they went to

look for Gordon. He had been to the doc

tor's, to find him too sick to come. On the

way back he had been chased by a drove of wolves, and, while the horse had escaped,

nothing but a few bones could be found of

Metathesis—the transposition of letters in

word-is a source of many clerical mis

haps. A writer in a late number of the

Spectator adduced some curious examples of this permicious habit. He cites the case of a

c.ergyman who, wishing to say that "we all kn-w what it was to have a half-formed

wish in our hearts," astonished his hearen

was to have a half-warmed fish in our

hearts;" and of another, who, having "started out" to say that "we should not

ow the knee to an idol," arrived at the con-

clusion "that we should not bow the eye to

THERE are about thirty Grand Dukes in

Russia, all of them being near relatives of

the Czar. Each receives from the State an

annual pension amounting to eighty thou-sand dollars, and the majority of them have large private fortunes besides.

announcing "that we all knew what it

from the wounds inflicted on the horse that

the house, and had not the lower log been

their way under.

most out.

furious and repeated efforts to force an en

him, but we had two axes in the

ed up as he dangled there and felt

JOE'S WIFE.

I am feelin' mighty trifflin' 'N' hedn't this gray head, I'd jes' turn in an' hev a cry yan four-posted bed,

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- W'n Laury Belle wuz married I never shed a chear; But nen she wuz a darter An' got 'er settle near;
- I knowed her man wuz stiddy, didn't seem to keer. But Joe's a marryin' ternight, Thet's why I'm grievin' so;
- It's 'bout like buryin' a son Ter see him wed, ye know. I'm sartin thet thar Susan Bates I nev no grudge agin her. Er wish to pick a flaw;
- Ter be my darter-'n-law. She's mighty cute and prutty-
- I'm not gainsayin' sich Her skin is w'te ez taller. Her eyes ez black ez pitch— An' ef she hedn't stole my Joe I'd like the little witch.
- She's hed a heap o' offers I've heerd my darter say, But never gin a shuck fer none Till Joe stepped down her way; or nen-but Joe's like me, an' I Wuz harnsum in my day.
- Awe well; I 'spose each mother It's playin' secon' fiddle Thet makes us feel amiss:
- An' gin thet gyurl a kiss.

 -Eva Wilder McGlasson, in Judge.

AMONG WILD ANIMALS.

Experiences of Some Early Settlers in Michigan.

Thrilling Adventures with Panthers and Wolves-Fearful Siege of a Backwoods Cabin by the Fero-

The capital of Michigan had scarcely been changed from Detroit to Lansing before my ather got the fever to go West, writes a correspondent of the New York Sun. We were then living in New York State and bing fairly well on a farm, but the talk about Michigan upset many a man who was then well enough off. I was fourteen years old the day we left for the West-father, mother, four children and a hired man. All of us, dear down to the baby, were enthusiastic and full of hope, and father was just the sort of a man the Detroit land-sharks were looking for. They sold him a swamp farm in Shiawassee County, and, in one way and another, cheated and defrauded him until we reached our destination with hardly a collar to begin on. A span of horses and cow constituted our live stock, and when father found how he had been duped he lost eart entirely. The swindlers guaranteed forty acres of clearing and a good log house. The clearing was a lake, and the log h was a wretched affair about sixteen feet square, which had been put up for some

It is not, however, of our family troubles I am going to talk. Michigan was a great game country at that date, and we soon dis overed that we had located pretty near headquarters. Inside of three days we had seen a panther, three wolves, a bear, alynx and an Indian devil. Our nearest neighbor was ten or twelve miles away, and the near We were dead est village about twenty. stark alone in the midst of a great wilder ness, and, aside from all other perils, the Indians, who were generally supposed to be peaceable, looked upon all pioneers with calous eyes, and made their stay unpleas ant in many ways. On the second day of our stay they stole our cow and ran her off into Ingham County, where we accidentally or they may have known nothing of our great calamity. That they were determined found her two years later, and inside of week they made several attempts to get the horses. It was not until fired upon that they left us in peace, and then the wild beasts and reptiles took hold. Our hut stood within two hundred feet of the edge of a great swamp, and the swamp was marters for rattlesnakes, blue racers black snakes, bears, panthers, wolves and every other creature belonging to the coun-During the first week of our stay we killed upward of a hundred snakes, most of them rattlers; and Gordon, the hired ma Who was a good shot, killed a bear and three

Our adventures with the panthers were pany and perilous, as the beasts seemed determined not to leave the locality. The first time I saw one my life was preserved n a most wonderful manner. ocated about ten days, and were clearing up a piece of land about a quarter of a mil the house. Father was sick in the house, Gordon was off after a deer for meat, and I was in the clearing alone, having light axe and cutting away at the small ees. The only thing I feared was the makes, having been assured that no wild beasts would attack me by daylight. In cutting down a young beech tree it fell upon an ironwood in a way to break it off about ten feet from the ground and leave the trunk badly splintered. This splintered trunk stood about fourteen feet from a very large beech. I had noticed it only in a general way, as I had set myself a stint to do, working with much enthusiasm. It was about four o'clock in the afternoon

and I was bending over to examine a curious

bug which was crawling at my feet, when a seream filled the woods, something hit and knocked me down, and next instant a wonderful situation was developed. A panther had sprung upon me from the large beech tree. The coward had no doubt been watching me for a long time and had waited ar me to get my back to him. He meant to dear the splintered ironwood in his spring, but he did not quite succeed. He had struck me with his paw, rolling me over, but not hurting me to speak of, and as he came down his right hind foot caught between two great splinters and held him fast. Then was treated to a circus. I was too scared to move, and stood not more than ten feet away and witnessed what nobody ever saw before. The beast hung head downward in the air, clawing and spitting and yelling, and the harder he struggled the more se surely was his foot imprisoned. Such screams and yells! Father and mother ome running at once, supposing I was at tacked, and an Indian who was hunting a mile or more distant was guided to the spot by the racket. The sharp claws sent splinters of wood flying all about and the lithe body bent and twisted like a snake. We had no gun, and father was too weak to venture to use the axe. We were, therefore, standing open-mouthed when the In dian came up and shot the panther through the head. He could not get the carcas until we had chopped the stub down and

split it open with wedges. A couple of weeks later a hunter came along who advised father to give up clearing for a year or two and trap and hunt. All torts of furs had a fair cash value, and the who had taken the body of the panther off with him, had made fifteen dollars on its The hunter told us how to make rade traps and dead-falls, and the three of a were soon busy with the game around One day I found a path le the edge of the swamp, and the soil bore unmistakable proofs that wild beasts passed that way. We had heard the scream of Banther. ers nightly, but I supposed the beas which used this path were wolves. I had made a stout rope of hickory peelings, and at a favorable point on the path I bent over a stout sapling, attached my rope, and then noosed it and carried the trigger to a bush. What I wanted now was the bait, and GorTHE ALMIGHTY DOLLAR.

Six Short Stories of Fortunes Made and Lost.

The Old Kentuckian Who Improved Every Opportunity-A Narrow Escape from Making a Snug Fortune-Zach

"Speaking of lost opportunities," incidentally remarked a man who had had some experience himself to a Chicago News yells, and when I reached a point where I could see the path I saw that a big panther had noosed himself. The noose had caught representative, "always reminds me of that Kentucky chap who visited a city. His friend showed him all the big men of the place, saying: 'There is Mr. So-and-So, who made a million by taking advantage of this or that opportunity, and this man's If the other beast, trapped through his own carelessness, was mad, this fellow, who had become the victim of a put-up louse was built by a gentleman who never iet the main chance go.'
"'Ah, yes, I see,' said the Kentuckian,

and he went home.
"The next year his friend came to visit him, and the host took him around to see

the sights.

"'You showed me lots of big men who knew when to hit the nail on the head. You see that man over there in the poorest kind of clothes?

" Yes. " Well, sir, twenty-five years ago he came here, peddling potatoes in a little basket. Guess what he's worth now.'

" A million? "'No, he ain't. Not a cent, and his basket is in hock. And yet he always took advanage of his opportunities.

'How's that?' "' He was a true Kentuckian; he never refused the offer of a drink.' "Since I heard of that," concluded the speaker, "I made up my mind that it deends upon how things turn out whether hey are opportunities. If for the good they are opportunities. Otherwise they have

another name.' "Two friends of mine in Nevada," said Western traveler, "had as narrow an escape from making a fortune as I ever knew. They were running a shaft in the White Pine district, and had been at work at it for more than a year. Every day they walked from their cabin to the mine, a distance of two miles, and used to sit down to rest on a ledge of rocks about midway. One day a tramp came along and sat down on the same rock. Having nothing to do he stayed there an hour or two, and out of idleness be gan chipping off pieces with a hammer which he had with him. To his astonishment the rock showed most excellent indicontinued prospecting up the ledge until he found a very rich vein of silver. He took up a claim, and in three months sold out for over \$50,000. The two miners who had made the stone their rest ing-place for months were the cheapest looking pair I ever saw, and soon left that part of the country, unable to stand the jeers of their comrades, who never let them forget what a fortune they had passed

although mother dared not leave the spot. After the wolves had worried us for an once had an opportunity to strike the Granite Mountain bonanza. One day, just of an effort to get in by way of the window, it being too high for them, they left us all after he had received a check for \$1,500 in of a sudden. I then dragged a chest across the floor to stop the hole in the door, and mother discovered that father was dead. sked him if he had any money he wanted to invest. The physician replied that he had a check for \$1,500 in his pocket which The poor man, weak as he was, had not been able to endure the fright of the athe was just going to deposit in the bank, and for which he had no immediate need. tack. We did not have many minutes for lamentation. The wolves had given place His friend told him not to put it in the bank, but to go straight to a broker's office and ourchase Granite Mountain stock with it. accompanied by a snarl, and we knew that Stock was then selling for 90 cents a share, a panther was at hand. It was a lucky thing and the physician's friend assured him he knew the property was of great value, and that in a very short time stock would be way up. But the medical gentleman gave im a knowing wink, ank said:

"Oh, no; you don't catch me on that. I want no mining-stock in mine." In vain his friend tried to persuade him to make the investment. He would not be persuaded. He could have purchased with his \$1,500 just 1,666 shares of the stock, which would be worth about \$100,000, and be bringing in \$833 a month.

Before the mining craze struck St. Louis Sergeant McGrew; of that city, had his them from trying the chimney, and then mother took one side of the window and I the other. We instinctively felt that it was the point of danger, now that the chest was the point of danger, now that the chest was the constitution of the constitut chance. Mr. Gus Ewing had just taken his first interest in mining stocks. He was brother's appointment, and was a frequency caller at the mayor's office. A part of the business of each day's visit was to prevail non McGrew to take a little plunge in Granite Mountain stock, but McGrew teadfast, and used to play in the growth of his Jersey stock and the crop prospects of his Ohio farm against the small, but favorable fluctuations of Granite Mountain as reported to him. He could have had all the ranite Mountain stock he wanted, and obliged his friend by taking it. He might

have been a millionaire had he taken the advice given him. Along back in 1820, when St. Louis was just beginning to look like something, Mr. J. B. C. Lucas owned the tract of land from Fourth to Twenty-fifth streets and from Chestuut to Olive streets. Even in that day the property was valuable. Mr. Lucas wanted to dispose of it, and put it on the market at \$20,000. Zachary Taylor, who afterwards became President of the United States, was a prospective purchaser. After some considerable discussion he agreed to buy the land if he could raise the money. Either Mr. Taylor did not try as hard as he might have done, or else his credit was not worth so much money; but he did not raise the \$20,000, and the property remained on Mr. Lucas' hands. In 1863 it was worth several million dollars, and had Mr. Zachary Taylor purchased it, when offered, he would have doubled his money ten times over.

Not long ago an aged negro working at was incapacitated by having his right hand accidentally crushed in the machinery. The road kindly paid the doctor's bill, and that was all they thought about the matter. A lawyer hunted up the old colored man, secured the case, and the railroad was glad to compromise at \$500. The lawyer took he money and went back to his client.

"Uncle, how much do you think you ought to get for the loss of that hand?" "Well, boss," said the old man, "I 'spec that 'ere han's wuth \$16 anyway.

mighty sore, I kin tell ye." The lawyer then told him what he had lone, and turned over \$250 to the old man who nearly dropped dead from surprise.

The good women who are so busy reform ing the world have taken up the doll enor mity now, and are to make public senti-ment too warm for it. "Hamlet" with the Prince left out would be spirited and entertaining compared with a little girl's unierse that was doll-less. There is a queen little element of sacredness in the relation between the inanimate pet and the live one that we saw amusingly and touchingly illustrated the other day. A small girl was holding her largest and most beloved dol well outside the window, and her mother protested, saying: "You will drop your big dollie; why do you hold it there so long?"
"I was showing it to God," said the baby, and the mother did not find, for the time any thing more to say. It might be as well to do away with a few other abuses, good women, before dooming the doll.

A muitary omcer once engaged a car in Cork, and at the end of the trip paid the driver sixpence. Now, sixpence was the exact amount due, but more gracious custo mers were in the habit of paying a shilling for the same distance. "Bad luck to the Zulus!" muttered Pat ruefully, looking at the same coin in his palm. The Zulu war was in progress, or had just ended, and the efficer turned round sternly: "What is that you say?" "Bad luck to the Zulus, sorr!" "Why do you say it?" "Faith, yer honer, because theyv'e killed all the shilling officers, and left none but the sixpence ones."

BRUINS AT HOME.

The Rare Spectacle Which Two Fishermen Enjoyed at Their Leisure. Two trout fishermen send to the New York; Sun an account of a very novel and interesting sight, which they claim to have seen near Poccao recently. They were tramping along a ridge on their way home when they came to a spot that overlooked a large tract of low land, with a great deal of old fallen timber scattered about and many de caying stumps. Through it ran a small brook. The sight that attracted the attention of the men was a large bear standing in the creek, while another one was digging away the stumps, followed closely by three The spectators were not more than hundred feet away from the bear family, but had not been seen. They sat down in the bushes and watched the maneuvers of the bushes and watched the maneuvers of the bears. At this season of the year bears have shed their thick coats of fur, and are the better enabled to undergo the long tramps they now begun in search of food. This during the summer, in addition to that got in an occasional visit to a sheep pastur or pig sty, is ants, grubs, angleworms, fish, frogs, insects and reptiles of all kinds and the tender growths of wild grass and water weeds. They seek the "down timber" in search of ants and grubs. Every stump or log that harbors them is instantly detected by Bruin, when with claws and teeth, the spot where the nests are is soon laid bare and their contents lapped up. family, whose presence the two fishermen hadldiscovered, were foraging after this mar ner. The old bear that stood in the creek remained perfectly motionless, gazing intently in the stream, sometimes for five ninutes at a time, when suddenly one of its huge forepaws, which he kept raised a few nches, would drop into the water with a splash and rest on the bottom. Then the pear would thrust his nose down to the bottom, and when it was lifted out again a fish would be brought up in the bear's mouth. Sometimes, instead of a fish, he would capture a frog, and once, to the disgust of the watcher, he brought to the surface a wriggling water-snake, which he soon dispatched and ate. Now and then he would before the cubs, and frequently shared with

an hour, during which time the one bear had

torn up almost an acre of decaying timbers

and the other one had captured many fish

and reptiles. The spectators, tiring of the

domestic life of wild bears, rolled a large

stone down the hill and set up a loud shout.
The old bears snorted and drew together,

MULHATTON OUTDONE.

the King of Reptiles.

The noise was heard again and was re-

It was a snake powerful in proportions,

carrying in its mouth a large brindle dog

and two pigs. It was traveling in the di-

rection of LeGuin's large mill and ginning

Bostwick, Bob Harper, Lon Cawthon, Will

Wynn and Bob Cawthon, with a number of other brave men, armed themselves with

rifles, shot-guns and club-axes and started

missiles were turned loose upon it. The

It was at this juncture that the most as-

vellow and purple, and when the tail had

reached a perpendicular point all the colors seen in nature had been vividly displayed. But the crowd was not to be bluffed in

any such style, and renewed the attack

with warmth, making it so warm that the snake made a wild rush for McGuin's mill

It drew up under the mill-house, and pre

pared to live or die fighting for its country.

Bullets were showered on it for an hour, but the final crash came at last. The

mighty wonder coiled itself about the pil-

the manner of Samson of old, and, emitting

and simultaneously uttered the words:

ture are submitted as evidence of its au

The New Explosive.

embles sulphur, and smells like pitch, and

is made up in capsules which look like thick wax candles and are covered with glazed

paper. It is composed of about four parts of nitrate of ammonium and one part of a

mixture of binitro and trinitrobenzine, with

saltpeter. A shell filled with "bellite" blew a wooden raftered hut to pieces, and is

evidently efficient for blasting purposes.

The inventor hopes to be able to demonstrate that it is capable of being used in

A flighty Tough Cat.

A cat with more than the traditional tenacity of life was rescued from a singu-

larly perilous perch in the fly-wheel of the engine in a Bristol worsted mill a few days

ago. The wheel was making 130 revolu-tions per minute, and the intermittent howls of dismay which escaped the terror-stricken feline attracted the attention of

stopped the cat was stiff with fright, and its whole body seemed to have been absorbed by its tail. It recovered after a few spasms

on the ground. The engineer believes the

at least two or three hours.

the cat had been clinging to the wheel for

Making Rifle Barrels.

one hundred and twenty barrels can now be

rolled in an hour by one machine. They are straightened cold and bored with corre-

sponding speed, and even the rifling is done automatially, so that one man tending six

machines can turn out sixty or seventy bar-

rels per day. With the old rifling machine

twenty barrels was about the limit of a day's

work, but the improved machines attend to

call the attention of the workman.

By means of recent improvements made

the engineer. When the engine

ilitary operations

"How have the mighty fallen!"

catagory of Georgia snake stories.

ars of the ponderous establishment after

menon ever recorded in his-

They came within gun-shot of the monster

out in pursuit of the huge reptile.

tonishing pheno

cold about the heart of an Indian

honored brother in black.

musement afforded by this glimpse of

plied his tormentor. "DID I tell you that Maud was learning the his mate. Whenever a fish was laid out for the cubs all three would rush for it, and a Sellers was calling. savage struggle, during which the cubs "No, you did not." snarled and bit and tumbled over one another, would result. The other old bear gave her undivided attention to the stump and logs, and the cubs followed her closely from upstairs?" sharing in all the delicacies she uncovered. "Those strains of music?" The men watched the bears for more than

" Yes." "I think I hear the sounds you refer to, but

and the cubs, whining like young degs, cud-died close to their parents. Then all five shuffled off at a rapid gait and disappeared in the thick laurels and hemlocks. with a savageness that betokened a powerfu thirst. At last nature struck and brought him up

least, dropsy. A friend called on him. "How are you,

Large Georgia Mill-House Crushed by eld man?" said the friend. As a crowd of gentlemen stood on one of the principal streets of Peeksville, Ga., a " Very bad," said Sokitup, " they're coming

few days since, discussing the question of street railroads and electric lights, they said the sympathizer. heard a weird, piercing scream that came from a northerly direction—seeming to issue from the park just back of the college.

"I'm 'fraid not," said the sick man; "nothing in this house ever lasted long after it was tapped."

brought in. She said to the little boy: straighten the kinky locks of your time-

> see if there are any eggs there? Don't bring in the china ones; leave them there, but if there are any others bring them in."

returned with two or three broken eggs, and nis pinafore soiled. The lady, seeing him ming, exclaimed:

Johnny looked at her in surprise and said: "How should I tell whether they were china eggs or not if I didn't try them?"

only effect produced was to cause the snake to raise its tail, presumably as a shield for little girl. She was eight years old and lived tory, or handed down by tradition, unfolded before the pursuers. As the tail arose it turned to a deep red color; on going a little late for school with another little girl about her own age. On their way they caught a higher it turned to a beautiful green; a litglimpse of a clock dial through an open door; tle higher and blue was developed; then

> 'it's five minutes to 9, and we'll be late to school."

"Jennie," said the pious little girl, impres sively, "I'll tell you what we must do; we'll kneel right down here and pray that we won' be late."

They " skun " and got there.

an agonizing squawk, began to contract its The mill-house trembled. Another squawk mother moment gone, and the mill and ginhim an increase of \$100 in salary next year When he sent his returns in he lacked 33 house was level with the ground, and with cents of the amount called for by the law to the king of reptiles passed away. As permit an adjustment of his salary. His rethe crowd turned to leave they looked back \$2,099.20. As the department allows a frac-The remarkable character of this story, tion over a half dollar to be counted as a taken in connection with the fact that it is dollar, the postmaster would have been \$100 vouched for by most reliable citizens, and more in pocket if he had had shrewdness en the dismembered timbers of a fallen structhenticity, entitles it to a lofty place in the his own pocket. Since he sent his report he has learned his mistake, and anybody in the county now can kick him. His was the only "Bellite," the new explosive which has been invented by M. Lamm, of Stockholm, seems destined to knock dynamite and per-haps melinite out of the field. The stuff recase of the kind in the 2,500. It caused much merriment among the clerks in the postoffice department.

> "Eggs," was the reply, and the dog look fixedly at me.

> reeback. Have you nething better?" "There's a bit of bacon," she suggested and the dog eyed me more intently than

> On the instant the dog jumped up and sprang out of the window. "Whew!" said I. "The word 'chicken was like a bombshell to him."

> "Ah," smiled the landlady, "that's be cause he turns the spit!" A LANK, limp, raw-boned countryman, one

VARIETIES.

SHE blushed herself at the time-worn phrasout she told him she "would be a sister to

himself, "but 'sister' doesn't mean flowers three times a week and losing bets just to pay gloves and things and bonbonniers as big as a house at Easter. Sisters ain't in the appropriation bill this year."

f she could borrow a dozen of eggs. She wants to put 'em under a hen. Neighbor-So you have got a hen setting

ave you? I didn't know you kept hens. Little Girl-No'm, we dont; but Mrs. Smith' goin' ter lend us a hen that wants ter set, an' ma thought that if you'd lend us some eggs we've got the nest ourselfs.

MRS. LENOX HILL JR., (getting ready to eave town)-Lenox, where shall I hide these silver spoons, in case thieves break in? Do you think between the mattresses would be a

Mr. Lenox Hill, Jr. (who knows what he is talking about)-Nonsense! Put them into one of your dress pockets in the closet, and if a burglar finds that he deserves the

WASN'T GROWING OLD GRACEFULLY .- He stuttered terribly, and one day he began to tell a story, prefacing it by saying that it was

'im-m-mense." He kept at it a long while, but succeede in getting only a little ways along in it, and

t last a country cousin, from Wayback Cener, rang the bell. "W-w-what you r-r-r-ringing your d-d-darn ed old b-b-b-bell f-for? I t-t-tell you this s-s-

story's a b-b-brand n-n-n-new one?" "Perhaps it was-when you began it," re

violin?" said a young lady on whom Tom

"Yes, she is practising now. Do you not near those strains of music floating down

don't they strike you as severe strains on the

His friend would not have called old Sokit up a temperance man. For years everything of a fluid nature has been swallowed by him

short with the jumps, liver, and last but not

to tap me to-morrow." "Well, perhaps you'll get all right then,"

peated at intervals of about two minutes. says the Jackson Argus. Directly the strange cry drew nearer and nearer until it came in JOHNNY, who is four years old, was playing in the yard one day, and a lady who lives sight. When it did so there was a vision close by wished to have the eggs, if any were that would have made the ruddy drops run laid since her last visit to the hennery.

> "Johnny, will you go to the hennery and Johnny started to do her bidding, and soon

> "Johnny, how did you break the eggs?"

THE story the other day about the plous little boy who tried to walk on the water in the bathtub recalls another of an equally pious in the country; she had started one day rather

it lacked five minutes of 9. "Oh, dear!" exclaimed the pious little girl

"I'm afraid we will."

"H'm!" said the other, "I guess that we'd etter skin right along and pray as we go!"

A STORY is told of a postmaster whose lack of knowledge of working his own "nest" lost ports showed the receipts of his office to be ough to buy 31 cents' worth of stamps out of

THE little dog of whom this anecdote is re. lated by a traveler in Spain was evidently more quick-witted than industrious. He had been taught to turn the spit before the fire. One evening I reached a solitary inn. Close to the stove lay a small dog warming itself in comfort. "What can you give me for din. ner?" I asked the landlady.

"Eggs," I repeated. "That is poor suste-

ance for a man who has come thirty miles or

"I am not passionately fond of bacon What else have you?" "Santa Anna!" cried the hostes. give you a chicken."

in the manufacture of rifles, as many as of those men who travel with an oilcloth grip sack, and who wear rakish linen dusters and carpet slippers, leaned over the desk of an uptown hotel—at least as the story runs—and informed the clerk that he'd like "tew have a room for 'few days." The clerk happene to be talking horse just then, and he paid about as much attention to the countryman every thing after being once started, and when the rifling is completed ring a bell to as he would to a tar baby. After waiting in open-mouthed silence for a while the stranger

tapped the clerk on the arm to draw his attention. He got a supercilious nod for his pains, and the clerk continued to explain to his friends why he had put his salary on the animal that didn't win. Still in silence and patience the poor yokel rested against the desk. Finally he blurted out a query as to whether or not the "heouse was goin' him up." Not the least notice from the clerk, who was now explaining his reason for play ing a horse for place when he ought to have bet on him to win. At last, seeing that the countryman was completely squeiched, he sabbed the register in front of him, flung a pen at him in a way that spattered ink all over the distingue's linen duster and glared at the chopfallen visitor while he scrawled

you put me in mind o' Clay?" "Oh, you are very kind," the clerk return ed graciously. "Of course you mean the great

his name on the register. "Do you know,"

the yokel asked when he had finished. " that

orator—Henry Clay?"
"No," came the drawling response—" no jest the common, ordinary clay-the kind they make slop jars out of. I'll take my key's

Chaff.

Why is a five dollar bill like a soap bubble? Because as soon as you break it, it goes. Corporations have no affections, but there are many ties that bind railroads to the

An exchange asks: "Does etiquette demand a vest on a hot day?" If it does, it can have

Nature uses a great "many quills to make goose, but a man can make a goose of himsel: with only one.

First Boy—Say, is your uncle bad? Second Ditto—Bad? Awful bad! The doctor says e's got shoebuckles on his lungs.

Truancy is our national game about this season, and it is attended by quite as many base hits and home runs as the average game

Bolton—Yonng Jones is generous with his cigars, isn't he? Wolton—Yes (puff); but I think he would (puff) be kinder to his friends if he smoked them himself.

"What were the last words of Brigham Young?" asked the teacher. "He never had any," replied the smart bad boy, "he was a

Dumpsey—Hello, Blobson! Seems as though you were looking poorly. Blobson—Yes, I'm tired to death. Dumpsey—Tired? You need a vacation. Blobson—Just back from one.

It does not require anything extraordinary there is a fortune in store for a man who can shoo a fly so that the little pest will stay

"I know my defects," said B-jinkins pon pously; and as the bystanders looked at him admiringly one of them whispered to another softly: "What an awful lot that man must know!"

A writer says an ordinary beetle can draw twenty times its own weight. We have seen the insect move a woman weighing 165 pound by simply alighting within half an inch of he

"Bridget," said the mistress to the new hired giri, "you can go now and put the mackerel in soak." "Sure, ma'am, air ye rejuced to that?" asked Bridget sympathet-

The young man who has tried it is almost ready to assert that there is only one thing in this world harder than it is to write short-hand, and that is to read it after you have

"Have you seen my wife?" asked Smith who was hurrying through the street. "By George!" he exclaimed in the next breath, "there goes her bustle around the corner now. She can't be a great way off." "What trials you must have," said the

lady, contemplating a famished tramp devouring the generous repast she had placed beforhim. "Yes'm, and the wust of it is I allum rets convicted. German Professor—In the old country one of our common proverbs is, "If I rest I rust." Young Mr. Ticker—Well, we have pretty nearly the same thing here, "If I trust I bust," is our version.

"Hi, there, sir," shouted a Florida landlor to a departing guest who was rushing for the train, "you've dropped your pocketbook." "All right," shouted back the guest, without stopping. "I've no further use for it."

Woman (kindly)—You say you are very hungry, my poor man; that you have had but little to eat for several days? Tramp (very earnestly)—Madam, there is a wooden toothpick that has lasted me nearly three weeks.

While the cannon was being fired last even ing a little girl of four years, who had neve heard a salute fired, became frightened, and said: "Mamma, I don't like to have then make that noise now; it is well enough when

At one of the recent public school examina tions among the questions asked was: "With what crime was Lord Bacon charged?" To which the hopeful youth responded as if by inspiration: "With writing Shakespeare's

touched his hat so politely to you just now. Hardcash? Hardcash—My tailor. Dumley, (with an envious sigh)—Ah, it must be a

"It is my opinion," remarked the snake editor, "that missionaries to the cannibal islands should be selected from among the Georgians." "Why?" asked the horse editor. "Because the savages would find the Georgia Cracker difficult to masticate."

Fond Wife-Dear, I am to be present at the Slimmons fancy dress party. It is a sort of a masquerade, you see, and I don't know what on earth to wear. Horrid Man—Why couldn't you put your hair up in three Psyche knots

and go as a hat rack? Country Minister—I am very sorry, Mr. Wrangle, but as I was driving from the parsonage before service I saw your little boy on Goosecreek bridge snaring for suckers. Mr. Wrangle—Is that so, parson? Did ye notice what luck he was having?

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dise, the only difference is in the platferm.

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Substitute for a Short Hay Crop.

A correspondent of the Toronto Globs thinks that owing to the almost universal failure of grass seeding the present season, there will undoubtedly be a short hay crop

in 1889. He says: No time should be lost in devising means to meet this shortage, for steps can be taken before winter that will more effectually lead to this end than any that can be taken after the winter is gone.

The only thing that can be done is to grow some substitute, and the preparations for doing so should be made at once. These preparations should embrace a twofold object of growing a substitute for hay, and that this substitute shall favor the seeding of the ground to grass on which it shall be grown.

The only substitute that can be grown before winter is rye. Where this is done the gound should be prepared at the earliest possible moment. The conditions favorable to the growth of a crop of winter wheat are also favorable to the growth of rye. If sown in August the rye can be pastured this fall, in which case it would not be wise is useless or nearly so. He touches his to to seed with timothy until spring; but when to the ground, but the leg gives way under sown in the ordinary time timothy should him, swings round. He cannot bring it for be sown with the rye at the rate of from four to six pounds to the acre, according to the richness or the poverty of the soil, as done for him to strengthen his the catch of this is much more certain in autumn. Clover seed-a mixture of the small red, alsike, and large red is best for average purposes-may be sown in the spring at the rate of from five to eight Many have a strong prejudice to growing where the grain shells, in the next crop, but value of the grain for feeding purposes.

of 1889 that we propose is a mixture of oats friction, twice a day. and peas, sown thickly, not less than three bushels to the acre, and in about equal quantities, or, perhaps, what is better, allowing the oats to preponderate. These may be sown on ground that is not very clean, and at the first moment that it will do in the spring. Ground that is not very clean will answer, if good and strong, as the splints-small enlargements of the bone, crop grows so thick that it tends to smother just below the knee on the inside, about the weeds, and is cut before they are quite ripe This crop should be cut in, say, the first stages of ripening, and will then make an excellent substitute for hay, producing an enormous yield under favorable conditions. The land should by all means be plowed this fall. Indeed, nearly all the land for spring crops should be plowed in the fall is best unless they interfere with the action if we are to expect uniformly good crops. When this crop is reaped the land may be at once turned over for fall wheat, where blister. the locality is suitable for growing this.

The third substitute is millet or Hungarian grass, which may be sown any time principal objection to its growth is the liability of the seed to perish from drouth tells in a recent letter how he discovered when sown in June. This will always horse to be blind which had been offered make it a hazardous crop, but it is an objection that does not apply to peas and oats said: When buying a great many horses in sown early in the spring.

A fourth substitute is fodder, or, as it i be sown in drills with an ordinary grain drill not less than three feet apart, and cultivated carefully, as corn sown for other purposes. The yield on well-manured loose land is enormous, and when cut in the glazed state of the grain makes in itself almost a complete all-round ration. Where properly tended it makes the ground as clean as a summer fallow. The crop may be bound in sheaves with rye straw or cord, and set up in stooks for autumn or winter use; or better still, cut and at once put into a silo where one has been constructed.

It is nothing short of a national calamity in any agricultural country when the catch of grass seed fails over a large area. It disarranges the whole system of farming, and renders a satisfactory rotation of crops impossible. The failure of no single crop is half so far-reaching in its consequences. An unusually large area should be sown to grass next year, indeed, must be sown, to restore the equilibrium. The most favorable grains on which to sow are, of course, rve, wheat and barley. When the seed is not sown on wheat and rye this fall, a thorough harrowing with Thomas' smoothing harrow, or one made on similar principles, when the grass is sown in the spring, will add much to the certainty of a catch.

Wealth in Onions.

The great onion producing belt of this State at present is a tract of 700 or 800 acres. known as the Chester Meadows. This tract lies on either side of the Erie Railroad track, between Greycourt and Chester. When the railroad was built through that part of Orange County, the tract was a swampy waste, into which thousands of tons of earth and stone had to be dumped, and two miles of piling driven, before a foundation for a road bed could be made. That wide stretch of decaying and malarious vegetable matter was an eyesore to the surroundings, which are the flower of Orange County's fragrant and fertile meadows: The owners of the vast waste regarded themselves as most unfortunate in its possession. It was not believed that it could ever be utilized in any way, and the payment of taxes on it was considered a waste of money. About thirty years ago, a farmer named Wm. Conklin, who owned a large portion of the tract, drained a spot in one corner of it, and was rewarded with a plot of the richest kind of soil. By way of experiment, he seeded it to onions, and gathered a most unheard of crop. This led to the gradual drainage of the entire swamp, and there is not now an acre on it that is not regarded cheap at \$600. As much as \$1,000 an acre has repeatedly been paid for

the reclaimed marsh, and more frequently offers of that price have been refused. From 150,000 to 200,000 bushels of onion are raised annually on the Chester meadows. - N. Y. Herald.

Peterinary Pepartment

Conducted by Prof. Robert Jennings, Veterinary urgeon. Professional advice through the columns of the Michigan Farmer to all regular subscriber Pres. The full name and address will be necessary that we may identify them as subscribers. The ymptoms should be accurately described to ensurerred treatment. No questions answered professionally by mail unless accompanied by a fee of one dollar. Private address, No. 201 First St. etroit. Mich. troit, Mich.

Hip Lameness.

CLARENDON, July 9, 1888

Veterinary Editor of the Michigan Farmer. I have a sucking colt, that was hurt by falling out of a bank barn door, nine feet the ground, striking on his left hip. We never could find any bones broken, or out of place though examined by M. D.; but his leg in a sling was useless—limpsey as a rag, and now when he begins to hobble about, it ward, or bear much weight on it. Can you tell us what is the difficulty? The trouble seems to be in the hip. Can anything be him square on his pins? He is a valuable colt, and we hate to give him up. Please answer in the FARMER and oblige. A SUBSCRIBER.

Answer. - The symptoms as described in. pounds to the acre. The rye can either be dicate severe injury to the upper portion of cut for hay or for the grain, as may be the leg or hip. The pathological condition, thought best. When cut for hay the work the most important, is not indicated. If may be done either by the mower or binder. the injury involves the bony structure it In the latter case the sheaves must not be is more serious than if confined to the musmade too large, which will hinder the curing. | cular. Under the circumstances we would advise you to call a competent veterinary rye because of its tendency to grow again surgeon to examine the animal, or have the doctor who examined it give us his opinion this is no serious objection where the farm- with reference to the injury, and the parts ing is rightly done. The advantages of anatomically involved. If the bones of the growing rye at this time are fourfold. It hip joint at their articulation are involved, furnishes an excellent opportunity for sow- there is little chance of perfect restoration; ing to grass, and thus recovering the lost but if the muscular parts only are affected; area of meadow land; it will provide hay, if there is a probability of restoring the animal necessary, or grain, and will produce straw to usefulness. Slings, in such cases, do fer the keeper of stock. For an exigency more harm than good. Let the animal have like the present it will be found a very use- its freedom and like a dog it will take care ful crop, and in favorable localities we fail of the injured leg. Bathe the leg well twice to see why it would not be an improvement a day with Evinco Liniment. If your drugto sow a good sprinkling of winter wheat gist does not keep it use the following: Oil along with it, which would enhance the turpentine, saturated with gum camphor, eight ounces; tincture of opium, eight ounces The second supplement to the hay crop Mix both together and apply with hand

Splints on Colt.

TECUMSEH, July 21, 1888.

reterinary Editor of the Michigan Farmer. I have a yearling colt that has never bee injured in any way that I know of, but in the last two months has developed two size of small hickory nuts. Some horsemen tell me that they will likely disappear in one or two years. What is your opinion and remedy'

Answer. - As described, the splints, unless they cause lameness, require no treatment. Isually they disappear if let alone, which of the knee joint. The treatment in such cases is the application of a fly or mercurial

Discovering Blindness by Watching the Ears.

ing and Dramatic News, of London, Eng., him by its owner for purchase. He Bombay for the government two very curious cases came to my notice, one of which sometimes called, ensilage corn, which may was this: I had bought over twenty horses one day. I used to sit at a table in the yard and horses were trought to me one at a time. If I liked its looks I got up and looked it over as to soundness and took or rejected the animal. I must mention that these were Arab, Persian and Gulf horses. One was brought to me that day, such a handsome caste Arab (an Onaiza breed) looking like a first-class Leicestershire hunter, that I thought I would not even examine him However I had him walked down the yard about sixty yards. The moment he was turned I observed his ears, and as he came toward me I said to myself, he's a blind one. When he got up to me I saw he had unusually large, full and prominent eyes; but on looking closely at them I found he had been born without pupils to his eyes. So I said in Hindoostanee to the Arab dealer, his owner, "Why, he is blind!" He put up both hands in the usual way and said, "Yes, sahib, he is." I don't know if all or many of your readers can see that a 788 head of cattle on sale, of which five loads horse is blind by looking at its ears, but the sign is upmistakable. No veterinary surgeon that I have asked has seen such a case as the above, although they have read of

Commercial.

DETROIT WHOLESALE MARKET.

DETROIT, July 27, 1888.

FLOUR.-Market quiet and unchanged. The export demand at present is only fair, and stocks west are quite large. Quotations on car lots are as follows:

Michigan roller process.... Minnesota, bakers.

WHRAT.-The week closes with a firm tone o the market and a fair amount of activity in the trade. No. 1 white has declined during the week, while other grades have held steady. Considerable new wheat is arriving from the southwest. Sales for future delivery are of the new crop. Chicago was steady yesterd and higher than the previous day. Closing quotations in this market yesterday vere as follows for old: No. 1 white, 89%c: No. 2 red, 8sc; No. 3 red, 78%c. New: No. 1 white, 88c; No. 2 red, 85c; No. 3 red, 78c. In futures No. 2 for July delivery sold at 84%c. and August at 84%c. No. 1 white for August sold at 84%c, September at 84%c, and De-

CORN.-Again lower. No. 2 spot quoted at 16%c, and for December delivery at 39c. OATS .- Quie. No. 2 white quoted at 37c,

and No. 2 mixed at 35% o per bu FHED,-Bran quoted at \$12 75@13 \$ and middlings at \$13@16.

CLOVER SEED .- Prime for October delivry quoted at \$4 40 % bu.

RYE.—Quoted at 60c \$ bu. for No. 2. BUTTER.-Market dull except for choice Fancy lots dairy sometimes bring 17c, choice 15@16c, and fair 10@12c \$ B. Creamery quiet at 18@20c W m.

CHEESE.—Now quoted at 9@9%e for full ream State, 91/010c for New York, and 82 81/4c for Ohio. Skims quoted at 5@8c. These are jobbing prices. From first hands prices are %c lower.

BGGS.—The market is steady at 15%@16c for fresh receipts. Demand fair and receipts

FORRIGN FRUITS.—Lemons, Messinas, oox, \$5 00@5 50; oranges, Messinas, \$6 5027 00 ♥ box; cocoanuts, ♥ 100, \$3 75@4 25; bananas, yellow, \$ bunch, \$1 25@2 50. Figs, 11@ 12c for layers, 14@16c for fancy.

BEESWAX .- Steady at 282300 \$ quality. Supply good. HONBY .- Market dull; new quoted at 150 6c for choice comb and 708c for extracted. MAPLE SUGAR .- Good stock is quoted at

9@10c w b. for Michigan and 11@12c for Ohio. Market dull. MAPLE SYRUP .- Quoted at \$1@1 25 \$ gal-

DRIED APPLES .- Quoted at 707%e for vaporated, and 6%c for sun dried. SALT .- Michigan, 80c per bbl. in car lots, r 85c in 10-bbl. lots; dairy, \$1 80@2 10 per

obl.; Ashton quarter sacks, 72c. BALED HAY AND STRAW .- Market firm. Timothy quoted at \$14@14 50 for No. 1 and \$12 for No. 2; mixed, \$828 50 \$ ton. Clover, \$11@12. Straw, \$7. These prices are for car ots on track.

BEANS,-Nothing doing. Quoted at \$2 45 @2 50 W bu. for city picked. POTATORS .- New southern are selling at \$2@2 50 % bbl. Receipts increasing.

ONIONS .- The market is quiet and steady t \$3 25@3 50 P bbl., and \$1 20@1 25 P bu. HIDES.—Green city, 4@4 %c # b., country, 5408c; cured, 8c; green calf, 4405c; salted, do. 676%c:sheep-akins, 50c/2\$125 each; bulls, stag and grubby hides % off.

APPLES .- Quoted at \$3@3 50 \$\text{\$0} bbl., and 50262c for 1/2-bu. boxes. Trade dull. PEACHES .- Michigan fruit is now in market but the inquiry is chiefly for southern. The \$3 50 and 22 lambs av 52 lbs at \$4 50 former quoted at \$1 75@2 \$4-basket crate for white, and \$2 22 25 W crate, and 80@6 c W peck for yellow. The latter \$3 25@4 W bu. oox and \$1 00 % peck case.

PLUMS .-- Quoted at \$527 per stand or \$2 @2 50 per 24 quart case for Wild Goose, the only kind in market. RASPBERRIES .- Cases of 1-bu, quoted at

\$2 75@3 for black and \$3 50 for red. Cases of 12 quarts red sold at \$1 20@1 35, and 16 quart cases of black at \$1 25@1 40. GOOSEBERRIES,-Quoted at \$3@3 50 \$ 2-

u. stand. The season is about over. HUCKLEBERRIES .- In better supply, and nuoted at \$2 75@3 50 W bu. Some of the receipts are in bad shape, hence the difference in price.

POULTRY .- Live quoted as follows Chickens, 9c P D.; roosters, 5c; turkeys, 10c; ducks, 728c; spring chickens, 121/2 P D. Per pair, pigeons, 25c. The market is steady at

EARLY VEGETABLES .-- Dealers are selling at the following range of prices: Comatoes 60@75 P 1/2 bu. box. umbers, 20@25c ¥ doz. Radishes, 25c doz. bunches. Onions, 20c \$ doz. bunches. String beans, 75c 9 bu. Wax beans, 85@90 W bu. Cabbages, \$1@1 25 W bbl. Green peas, 35c per bu. Celery, 30@40c \$ doz. inches. Corn, 12@15c W doz

WATERMELONS .-- Quoted at \$20@25 \$ 100. Demand only fair. CHERRIES .- Sour quoted at \$323 50 9

u.; very few in market. CURRANTS .- Offered at \$1 75@2 \$ bu. for

ither red or white. Supply good. PROVISIONS .- Barreled pork, bacon and houlders are higher; no other changes. Quo-

tations here are as follows:		
Mess, new		
Pamily	16 00 @16	35
Short clear	16 50 @16	75
Lard in tierces, W D	8 0	834
Lard in kegs, \$ D	83400	84
Hams, 9 D	12 @	1814
Shoulders, & D	8% (2)	9
Choice bacon, & b	1040	10%
Extra mess beef, new per bb!	@ 7	50
Tallow, # 5	8140	4
HAY The following is a	record of	the

sales at the Michigan Avenue scales for the week up to Friday noon, with price per ton: Monday—20 loads: Seven at \$11; four at \$9; three at \$10; two at \$12 and \$10 50; one at \$13 and \$9 50. Tuesday—25 loads: Six at \$12; five at \$11; three at \$12 50 and \$10; two at \$11 50 \$10 50; one at \$18, \$17 and \$9.

Wednesday—19 loads: Five at \$12; four at \$11 and \$10; three at \$12 50; two at \$13; one at

Thursday—8 loads: Three at \$11; two at \$12 and \$10; one at \$9 50.
Friday—11 loads: Four at \$10; three at \$11; two at \$12 50 and \$10 50.

LIVE STOCK MARKETS.

At the Michigan Central Yards. Friday, July 27, 1888.

All the live stock received at these yards this week were consigned to local dealers, or billed through to Buffalo, excepting one load of hogs that averaged 167 lbs and sold at \$6 30 per hundred.

> King's Yards. Friday, July 27, 1888. CATTLE.

The market opened up at these yards with were westerns. The supply of good native pattle was light, and the westerns with the half fatted natives made up the bulk of the offering. Anything that could be classed as fair butchers' stock sold fully up to last week's prices, but the common cattle were weak but not quotably lower. The following

were the closing QUOTATIONS: Fancy steers weighing 1,500 to 1,650 Extra graded steers, weighing 1,300

cows, heifers and light steers..... Coarse mixed butchers' stock—Light thin cows, heifers, stags and bulls Allen sold Knoch 5 good butchers' steers av ,054 lbs at \$3 85. Bunnell sold Brooka 28 feeders av 850 lbs

at \$2 90.

Hogan sold Caplis a mixed lot of 8 head of thin butchers' stock av 777 lbs at \$2 50.

Richmond sold Fliesohman a mixed lot of shead of fair butchers' stock av 823 lbs at \$3.

Sullivan & F. sold McGee 29 mixed westerns av 867 lbs at \$3.40 and 5 to Kofski av 790 t \$2 90.

lbs at \$3 20.
Allen sold Switzer & Ackley 6 stockers av 756 lbs at \$2 60.
Hill sold Wreford & Beck a mixed lot of 18 nead of good butchers' stock av 1,007 lbs at 33 40 and 10 fair ones to Mason av 810 lbs at 90. Sheldon sold J Wrsford 7 fair butchers

steers and helfers av 864 lbs at \$3 50.

McCafferty sold Brooka 25 feeders av 990 be at \$3 12%.

Hogan soid Switzer & Ackley 5 fair butchers' steers av 915 lbs at \$3 50 and a mixed lot of 5 head of fair butchers' stock to Marshick av 872 lbs at \$3.

Robb sold Kamman a mixed lot of 15 head Allen sold Farnam a mixed lot of 11 head of thin butchers' stock av 809 lbs at \$3.

Allen sold Farnam a mixed lot of 11 head of thin butchers' stock av 835 lbs at \$2 50.

Gleason sold Reagan a mixed lot of 24 head of thin butchers' stock av 697 lbs at

13 head of good butchers' stock av 1,100 lbs at

Cuiver sold Denk a mixed lot of 9 head of

Cuiver sold Denk a mixed lot of 9 head of thin butchers' stock av 855 bs at \$2 40.

Scofield sold H Roe a mixed lot of 8 head of fair butchers' stock av 817 lbs at \$2 85.

Shepard sold Burt Spencer 10 fair butchers' steers av 1,056 lbs at \$3 50 and 6 stockers to Switzer & Ackley av 840 lbs at \$2 80.

Brooka sold McGee 24 mixed westerns av 659 lbs at \$2 20 and 18 av 1,061 lbs at \$2 50.

Proctor sold Denk a mixed lot of 13 he ad of thin butchers' stock av 772 lbs at \$2 60.

Scofield sold Burt Spencer 3 fair butchers' steers and a cow av 998 lbs at \$3 25. teers and a cow av 998 lbs at \$3 25.

McMulien McMulien sold McIntire a mixed lot of 9 ead of thin butchers' stock av 590 lbs at

Estep sold Switzer & Ackley 10 feeders av 929 lbs at \$3.25.
Purdy sold Burt Spencer 2 fancy steers av 1,776 lbs at \$5.25 and 9 good butchers' ateers Webb sold Stonehouse a mixed lot of 17

lead of fair butchers' stock av 790 lbs at \$2 85.

Shepard sold Kamman a mixed lot of 8 head of thin butchers' stock av 626 lbs at \$2 65.

Purdy sold Voigta mixed lot of 11 head of fair butchers' stock av 830 lbs at \$3.

Sheldon sold Bussell a mixed lot of 14 head of thin butchers' stock av 917 lbs at \$3 50.

Sullivan & F sold Hopfhauser 25 mixed vesterns av \$50 lbs at \$2 50.

westerns av 850 lbs at \$2 50 and 28 to Marx av 192 lbs at \$3. McMullen sold J Wreford 4 thin heiters av 783 lbs at \$2 90. Capwell sold H Roe 4 fair butchers' steers

v 980 lbs at \$3 25, and one weighing 990 lbs at \$3 50. Sullivan & F sold Switzer & Ackley 5 stockors av 842 lbs at \$2 75.

Purdy sold Brooka 8 fair butchers' steers av .014 lbs at \$3 20 and a mixed lot of 7 head of

good butchers' stock to Wreford & Beck av 827 lbs at \$3 20. Shaw sold Stucker a mixed lot of 23 head of fair butchers' stock av 803 lbs at \$2 90. Butter sold Farnsm a mixed lot of 8 head of thin butchers' stock av 806 lbs at \$2 75.

The offerings of sheep numbered 1,973 head The sheep market was fairly active and the receipts were closed out at about last week's

Micol sold Cuiver 49 av 83 lbs at \$3 65. Johnson sold Cuiver 52 av 83 lbs at \$3 40. Reason sold Loosemore 32 av 72 lbs at Craver sold Purdy 223 av 80 lbs at \$3 60.

Ingersoil sold Fitzpatrick 43 av 77 lbs a

Terry sold Young 90 av 78 lbs at \$3 80 and 81 to Monahan av 69 lbs at \$2 90.
Purdy sold Morey 96 av 77 lbs at \$3 45 and lambs av 65 lbs at \$5. McMuilen sold Culver 37, part lambs, av 7 bs at \$3 50. Switzer sold Fitzpatrick 41 av 70 lbs at \$3. Capwell sold Loosemore 51 av 77 lbs at

Purdy sold Fitzpatrick 128, part lambs, av Whittaker sold Young 78 av 80 lbs at \$3 60. Longcor sold Fitzpatrick 127 av 69 lbs at ? 75.

Angell sold Switzer & Ackley 56 av 85 lbs at \$3 50. Lovewell sold John Robinson 110 av 63 ibs at \$2 60. HOG8. The offerings of hogs numbered 938 head

The sellers had a bonanza in the hog market this week, as buyers paid them 25@30 cents more per hundred for them than they brought last week. The yards were cleared early and the market closed firm at the advance. Reason sold R S Webb 30 av 167 lbs at \$6 15. Merritt sold Webb Bros 36 av 170 lbs at

Allen sold Webb Bros 15 av 174 lbs at #6 40. Johnson sold Rauss 36 av 171 lbs at \$6 20. Hawley old Webb Bros 47 av 165 lbs at Hauser sold Rauss 58 av 183 ibs at \$6.

Hogan sold Webb Bros 16 av 165 lbs a 5 10.

G Spencer sold Rauss 12 av 167 ibs at \$6 30.

McCafferty sold Rauss 22 av 211 ibs at \$6.

Frank sold R S Webb 34 av 205 ibs at \$6. Mawley sold C Roe 20 av 179 ibs at \$6

Whittaker sold R S Webb 39 av 125 lbs at McMullen sold Webb Bros 33 av 163 lbs at Scofield sold Webb Bros 27 av 191 lbs at

Pinkney sold RS Webb 12 av 175 lbs at Shepard sold Webb Bros 25 av 200 lbs at Huntley sold Ford 27 av 98 lbs at \$6.

Clark sold R S Webb 13 av 143 lbs at \$6 Capwell sold Clark 24 av 136 lbs at \$6 25. Sweet sold Peach 51 av 147 lbs at \$5 90. at \$6 25. McMulien sold Rauss 74 av 188 lbs at \$6 25. Spicer sold Peach 30 av 140 lbs at \$6. Clark sold Webb Bros 14 av 175 lbs at \$6 20.

Buffalo.

CATTLE .- Receipts 13,284 against 13,130 the previous week. The market opened up on Monday with a large supply on sale, there being 226 car loads. The demand was only fair, and prices were 20@30 cents lower than on the Monday previous. Good 1,400 to 1,500 lb steers were quoted at \$5 30@5 60, with three loads of choice at \$5 75; good 1,300 to 1,400 lbs, \$5@5 35; good 1,200 to 1,300 lbs do, \$4 70 @5; good 1,100 to 1,200 lb do, \$4 10@4 50, and fair to good 1,000 to 1,100 lb do, \$3 55@4 10: mixed butchers of good to choice quality. \$3 25@3 75; inferior to fair do, \$2 50@3; fat bulls lower and in light demand, selling at \$2 50@2 75; there were only three loads of fair to choice stock cattle for sale: the market was dull, but all were sold at \$2 5023 to \$3 25 for choice tops. There were only 2 loads received on Tuesday and Wednesday, trading being confined to odds and ends left over from Monday. The market on Thursday was steacy, the supply being very light, and the feeling was steady. On Friday there were to loads offered, but no sales were reported.

The following were the closing QUOTATIONS: Extra Beeves-Graded steers, weigh-Extra Beeves—Graded steers, weighing 1,500 to 1,600 lbs.
Choice Beeves—Fine, fat, well-formed steers, weighing 1,400 to 1,500 lbs.
Good beeves—Weil-fattened steers weighing 1,300 to 1,400.
Medium Grades—Steers in fine flesh, weighing 1,700 lbs. 1,780 lbs.
Light Butchers"—Steers sveraging 1,000 to 1,100 lbs, of fair to good quality. 85 75@ 6 O 4 75@5 00 4 10/24 50

SHEEP.-Receipts 37,800, against 42,400 the previous week. The offerings of sheep on Monday consisted of 42 car loads. The market was slow and dull, the bulk of the sheep on sale being of ordinary quality. Common to fair sheep brought \$3 50@4, fair to good, \$4@4 50, and a few choice, \$4 75. Western lambs quotable at \$5 25@6 25. The market was steady on Tuesday and Wednesday with was steady on Tuesday and wednesday with light receipts. There were 3 loads on sale Thursday. The demand was active and prices 15@20 cents higher. On Friday there were 12 loads of sheep on sale. The market was fairly active and prices steady. Common to fair sheep sold at \$3 50@4 15; good to choice. ice, \$4 25@4 75; lambs 50 to 60 lbs, \$5 50@

3 25. Hogs.—Receipts 39,131, against 49,526 the previous week. There were 52 loads of hogs on sale Monday. The market opened up with a good demand at full Saturday's prices, but closed weak. Good to choice Yorkers sold at \$2 2506 35; fair do, \$606 20; selected medium weights, \$6 4006 50. There was one load on sale Tuesday and four loads on Wednesday. the market was strong and prices advanced 10 cents. There were 6 loads on sale Thursday. The demand was fair and prices steady. On Friday the supply of hogs was light and the market steady. Good to choice Yorkers sold at \$6 40@6 50; fair do, \$6 20@6 30; selected medium weights, \$6 50@6 60.

Chicago.

CATTLE.-Receipts, 27,644 against 25,656 ast week. Shipments 10,588. The receipts of cattle on Monday numbered 10,188 head. The market opened up active for good native cattle, the supply of which was small, and prices on this class were steady at the prices of G Spencer sold Burt Spencer a mixed lot of Saturday, but other grades were lower. NEW ADVERTISEMENTS.

NEW ADVERTISEMENTS.

NEW ADVERTISEMENTS

The Oliver Chilled Plow Works

OLIVER'S

COMBINATION PLOWS



Which have Fairly Captured the State of Michigan by their own Merita

The above Cut shows the No. 99 Steel Beam Combination Plow and the same Plow with a number of other patterns and sizes is made with wood bean These plows are fitted with Reversible Shares and Points, self-sharpening use, and their work is First Class in all respects. Fitted with both Cast an Steel Slip Points, adapting them to any soil.

TIME SAVED!

MONEY SAVED!

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BY THE USE OF-Combination

Oliver's Chilled Plows, Oliver's Steel Plows, and Oliver's Sulky Plows als made in great variety and warranted the best of their kind.

Chilled Plow

Eastern shippers and exporters bought poor to fancy steers at \$3 90@6, principally at \$5 15 5 75. Dressed-beef men paid \$3 50@3 70 for ommon grass steers to choice corn-fed teers. Coarse "grassers," av 1,160 lbs sold at \$3 75, and prime 1,182 lb Poiled Angus steers at \$5 70; seven loads of 1.131 lb Neraska steers at \$5 65, and 219 distillery steers av 1,149 lbs sold at \$5 50; corn fed westerns av 1,211 lbs sold at \$5 30. A trainload of Montana grass Texas cattle, av 1,166 to 1.242 lbs sold at \$4 8005. The season for Montana cattle is about four weeks ahead of last year. Texas cattle sold at former quoations, and native butchers' stock was also steadily held. Stock cattle unchanged. Prices for the best cattle were 10 cents higher on Tuesday, with other grades steady. Or Wednesday the market for good cattle was strong but common lots were weak. The market on Thursday was slow and declined 10 cents. On Friday the market for all grades of cattle was slow and prices 5@10 cents

lower. The following were the closing SKOITATOUS: Native grassers, 950 to 1,900. ancy native cows and heifer Texas steers 740 to 1,100 lbs.

Stock steers, 500 to 900..... Feeding steers, 900 to 1,200 Hogs.-Receipts 37,587 against 42,122 last week. Shipments 24,079. The receipts of hogs on Monday numbered 15,892 head. The demand was active and the market ruled steady and strong at full Saturday's prices. Poor to prime light sold at \$5 95@6 30: in ferior mixed to chalce heavy, \$5.8026.35; skips and culls, \$405.65. The receipts were light on Tuesday and prices advanced 10 cents, and another five cents was added on Wednesday. For light hogs on Thursday prices were steady, but other grades were ! cents lower. On Friday the demand for hogs was active and the market steady. Poor to prime light sold at \$626 45; inferior mixed to choice heavy, \$5 9026 50; skips and culls, \$4 10@5 80.

NEW ADVERTISEMENTS.



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